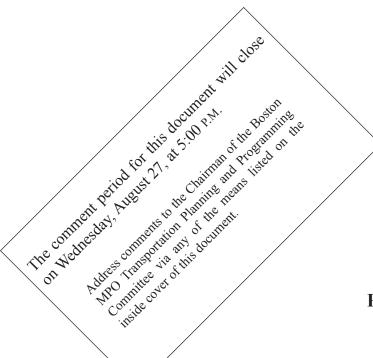
Unified Planning Work Program

Fiscal Year 2004



Transportation Planning and Programming Committee Draft July 24, 2003

Central Transportation Planning Staff

Directed by the Boston Metropolitan Planning Organization, which is composed of:

Executive Office of Transportation and Construction

Massachusetts Bay Transportation Authority

Massachusetts Bay Transportation Authority Advisory Board

Massachusetts Highway Department

Massachusetts Port Authority

Massachusetts Turnpike Authority

Metropolitan Area Planning Council

City of Boston

City of Everett

City of Newton

City of Salem

Town of Bedford

Town of Framingham

Town of Hopkinton

Federal Highway Administration (nonvoting)

Federal Transit Administration (nonvoting)

Regional Transportation Advisory Council (nonvoting)

For additional copies of this document or to request it in an accessible format, contact us:

By mail Central Transportation Planning Staff

Certification Activities Group 10 Park Plaza, Suite 2150 Boston, MA 02116

By telephone (617) 973-7119 (voice)

(617) 973-7089 (TTY)

By fax (617) 973-8855

By e-mail mesullivan@ctps.org

Or download at www.ctps.org/bostonmpo/resources/reports.htm.



The Boston Metropolitan Planning Organization Region

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1 EXECUTIVE SUMMARY

This document programs funding for surface-transportation planning projects that will be conducted in the Boston metropolitan region during the period of October 1, 2003, through September 30, 2004 (federal fiscal year 2004). The Unified Planning Work Program (UPWP) is an essential transportation-planning tool for the region. It is frequently a first step in determining whether or not a project will be constructed. It is also integrally related to other planning efforts conducted by the Boston Region Metropolitan Planning Organization (MPO) as well as by transportation agencies such as the Massachusetts Bay Transportation Authority and the Massachusetts Highway Department.

An effort has been made throughout the document to demonstrate this important relationship. For instance, there is a graphic in Chapter 2 that shows how the UPWP interacts with the MPO's Regional Transportation Plan (RTP), Transportation Improvement Program (TIP), and Congestion Management System (CMS) reports, as well with the MBTA's Program for Mass Transportation (PMT), current feasibility studies, and other visioning processes. In addition, the project listings in Chapter 5 through Chapter 9 contain both graphic representations and text showing the sources of planning projects' sources and connections to other documents.

The projects in this UPWP will be funded from federal, state, and local sources. It has been prepared in accordance with regulations implementing the federal Transportation Equity Act of the 21st Century (TEA-21) as well as recently revised Federal Highway Administration and Federal Transit Administration grant application requirements and planning emphasis areas. This UPWP contains 78 projects, of which 67 will be carried out by the Central Transportation Planning Staff (CTPS) and by the Metropolitan Area Planning Council (MAPC) on behalf of the Boston Region MPO, the MBTA, MassHighway, the Massachusetts Port Authority, or the City of Somerville. The remaining 11 projects will be carried out by individual transportation agencies, municipalities, and academic institutions.

The UPWP is intended to serve two purposes. The first is to provide information to government officials, local communities, and the general public about all surface-transportation planning projects that are expected to be undertaken in the Boston region. The second is to provide complete budget information to federal and state officials about the expenditure of federal funds for those projects being carried out by the Boston Region MPO.

The UPWP is structured as follows. Chapter 2 provides general information about the Boston Region MPO, the transportation planning process, and the sources of funding for UPWP projects. It also explains the MPO's role in programming these funds and the evaluation criteria the MPO used to select the projects it was responsible for programming in this UPWP. Those

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who are new to the region's process are encouraged to read chapter 2 so that they may have a better understanding of the process and of how the UPWP fits into it.

Chapter 3 provides a status report on the fiscal year 2003 UPWP projects that were conducted by CTPS and MAPC. It also includes a listing of products for those projects and information on how to obtain copies of technical reports and certification documents.

Chapter 4 is an index of fiscal year 2004 projects. They are categorized by the agency responsible for conducting them.

Chapters 5 through 9 contain project descriptions and detailed budget information for all work being conducted by CTPS and MAPC on behalf of the MPO. They also contain project descriptions and detailed budget information for transportation projects being conducted by CTPS on behalf of the MBTA, MassHighway, and Massport.

Chapter 10 provides budget summaries of the projects included in Chapters 5 through 9 and other information about the status of federal funding in this UPWP. It is intended to provide federal and state officials with information necessary for funding approval and contract administration.

Appendix A briefly presents project information for other *non-MPO* transportation planning projects that will be conducted in the Boston region. These projects have separate review and approval processes and are outside the purview of the MPO. They are included in the UPWP to provide a complete picture of what is being planned for the region and to ensure that MPO planning efforts within the region are coordinated with other ongoing work.

Appendix B describes the public participation process used for UPWP development and review. The final document will include a summary of written comments on the document that are received during the review period and the MPO's responses to them.

Appendix C is a glossary of acronyms and transportation terms. An effort has been made to define such terms not only in the glossary but also the first time they appear in a chapter.

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2 THE TRANSPORTATION PLANNING AND PROGRAMMING PROCESS IN THE BOSTON REGION MPO

This chapter is intended to give the reader an understanding of how the transportation planning process is conducted in the Boston Region Metropolitan Planning Organization (MPO), including the federal requirements that govern the process, the funding sources used to carry it out, and the implementation of the process from concept to completion.

Section 134 of the Federal Aid Highway Act and Section 5303 of the Federal Transit Act, as amended, require that urbanized areas, to be eligible for federal funds, maintain a continuing, cooperative, and comprehensive transportation planning process (3C process) resulting in plans and programs consistent with the planning objectives of the metropolitan area.

THE BOSTON METROPOLITAN PLANNING ORGANIZATION

The Boston Region MPO encompasses the 101 cities and towns in the map on page iii of this document. Its members are the Commonwealth's Executive Office of Transportation and Construction, the Cities of Boston, Everett, Newton, and Salem, the Towns of Bedford, Framingham, and Hopkinton, the Massachusetts Bay Transportation Authority, the Massachusetts Bay Transportation Authority Advisory Board, the Massachusetts Highway Department, the Massachusetts Port Authority, the Massachusetts Turnpike Authority, and the Metropolitan Area Planning Council. In addition, the Federal Highway Administration, the Federal Transit Administration, and the Regional Transportation Advisory Council participate in the MPO as advisory members.

- The Executive Office of Transportation and Construction (EOTC) has the statutory responsibility, under Chapter 6A of the Massachusetts General Laws (MGL), of conducting comprehensive planning for and coordinating the activities and programs of the state transportation agencies. For the work program described in this UPWP, EOTC will provide general planning support; assistance in the production of certification documents; and monitoring of public participation procedures, air quality analyses, and the hiring of minority business enterprises.
- The *Massachusetts Bay Transportation Authority (MBTA)* has the statutory responsibility within its district, under the provisions of Chapter 161A, MGL, of preparing the engineering and architectural designs for transit development projects, constructing and operating transit development projects, and operating the public transportation system. The Commonwealth's fiscal year 2000 budget provided for Forward Funding of the MBTA and the restructuring of the MBTA district. The district now comprises 175 communities, including all 101 cities and towns of the Boston Region MPO. The MBTA board of directors consists of a chairman and

eight other directors appointed by the governor. The MBTA will provide general transit planning in support of this UPWP's projects.

• The Massachusetts Bay Transportation Authority Advisory Board was created by the Legislature in 1964 through the same legislation that created the MBTA; this legislation was updated as part of Chapter 127 of the Acts of 1999. The Advisory Board consists of representatives of the 175 cities and towns that compose the MBTA district. Cities are represented by either the city manager or mayor, and towns by the chairperson of the board of selectmen. Specific responsibilities of the Advisory Board include review of proposed fare increases, approval of the Program for Mass Transportation, annual review of the MBTA Capital Investment Plan, review of the MBTA's documentation of net operating investment per passenger, and approval of the MBTA's operating budget with authority to reduce funding items.

The Advisory Board has additional responsibilities in transportation capital planning. In accordance with other state and federal requirements, a Memorandum of Understanding between it and five other agencies (the MBTA, EOTC, the Massachusetts Highway Department, the Massachusetts Port Authority, and the Metropolitan Area Planning Council) was drawn up delineating a process for sharing both input and responsibilities in conducting capital planning for the region's transportation needs.

The Advisory Board has been designated by the governor as one of the agencies that are representative of local elected officials for purposes of constituting the MPO. Advisory Board meetings are open to the public and provide an opportunity for the public to keep abreast of issues relating to transit service and of the positions that community representatives have taken on them. In addition, the findings of the Advisory Board staff's research on key transit issues such as fare policy and management practices are available to communities and members of the public.

- The *Massachusetts Highway Department (MassHighway)* has the statutory responsibility of planning, designing, constructing, operating, and maintaining highways and related facilities. Within MassHighway, the Bureau of Transportation Planning and Development (BTP&D), under Chapter 563 of the Acts of 1964, has the statutory responsibility of serving as the principal source of transportation planning in the commonwealth. The BTP&D will contribute staff resources and technical assistance to the Boston region transportation planning efforts described in this UPWP. Also, MassHighway's Bureau of Project Development has been established to serve as the principal unit shepherding highway projects toward implementation. MassHighway's policy board, appointed by the governor, consists of a commissioner and four associate commissioners.
- The *Massachusetts Turnpike Authority (MassPike)* is authorized to own, construct, maintain, improve, repair, operate, and administer the Massachusetts Turnpike and the Metropolitan Highway System (MHS) as established under Chapter 3 of the Acts of 1997. The MHS, as defined in the statute, consists of "...the integrated system of roadways, bridges, tunnels, overpasses, interchanges, parking facilities, entrance plazas, approaches, connecting highways, service stations, restaurants, tourist information centers and administration, storage,

maintenance and other buildings that the authority owns, constructs or operates and maintains pursuant to the provisions of this chapter which consists of the Boston extension, the Callahan tunnel, the central artery, the central artery north area, the Sumner tunnel and the Ted Williams tunnel and any additional highway, tunnel and bridge components as the general court may from time to time determine."

- The *Metropolitan Area Planning Council (MAPC)* is composed of the chief executive (or her/his designee) of the 101 cities and towns in the MAPC district, 21 gubernatorial appointees, and 12 ex officio members. It has statutory responsibility for comprehensive regional planning in the district under Chapter 40B of the MGL. It is the Boston Metropolitan Clearinghouse under Section 204 of the Demonstration Cities and Metropolitan Development Act of 1966 and Title VI of the Intergovernmental Cooperation Act of 1968. Also its district has been designated an economic development district under Title IV of the Public Works and Economic Development Act of 1965, as amended. MAPC's responsibilities for comprehensive planning include responsibilities in the areas of technical assistance to communities, assistance to communities in the review of documents and programs for public relations, and the development of zoning, land use, demographic, and environmental studies.
- The City of Boston, three elected cities (currently Everett, Newton, and Salem), and three elected towns (currently Bedford, Framingham, and Hopkinton) represent the region's 101 municipalities in the Boston MPO. The City of Boston is a permanent MPO member; the six elected municipalities serve terms as established in the MPO's Memorandum of Understanding, endorsed in December 2001.

Three other members participate in the Boston MPO in an advisory capacity, reviewing all Regional Transportation Plans, Transportation Improvement Programs, and air quality conformity determinations to ensure compliance with federal planning and programming requirements:

- The *Federal Highway Administration* and *Federal Transit Administration* oversee the highway and transit programs of the U.S. Department of Transportation under pertinent legislation and the provisions of the Transportation Equity Act for the 21st Century.
- The *Regional Transportation Advisory Council*, the MPO's citizen advisory group, provides the opportunity for organizations and municipal representatives to become actively involved in the decision-making processes of the agencies that plan and program transportation services in the region. The Advisory Council reviews, comments on, and makes recommendations regarding certification documents. It also serves as a forum for identification of issues and alternatives, advocates solutions to the region's transportation needs, and generates interest and knowledge among the general public.

Three other entities assist the MPO members in carrying out the responsibilities of the Boston region's 3C planning process through policy implementation, technical support, and public participation:

- The *Transportation Planning and Programming Committee*, acting on behalf of the MPO members, meets regularly to provide ongoing coordination of planning efforts taking place within the region. It consists of a representative from each MPO member, with the EOTC representative serving as chairperson. The group's functions are to strive for the integration of transportation planning and land use planning efforts and to provide direction to the Central Transportation Planning Staff (CTPS). This includes overseeing the work described in this UPWP and approval of CTPS's hirings of professional staff. The Advisory Council is a voting member of this committee.
- The Central Transportation Planning Staff (CTPS) is an interagency staff created by the MPO to carry out general transportation planning activities on its behalf and provide agencies with analyses required for the work described in this document.
- The MAPC subregional groups (SRG's) bring together representatives (usually appointed or elected officials or their staff) of the communities within a subregion of the MAPC district to address shared concerns regarding transportation and land use. MAPC has promoted and supported the formation of SRGs in order to foster better communication and cooperation among communities. They have played an important role in the MPO region's participatory process, including the development of TIP and UPWP project priorities.

THE TRANSPORTATION PLANNING PROCESS

The 3C process in the Boston region is the responsibility of the Boston Region Metropolitan Planning Organization (MPO), which is described on the next page. The MPO has established the following objectives for the process:

- To identify transportation problems and develop possible solutions to them.
- To strike a balance between short-range and long-range considerations, so that beneficial incremental actions undertaken now reflect an adequate understanding of probable future consequences and possible future options.
- To take into account both regional and local considerations and both transportation and nontransportation objectives and impacts in the analysis of project issues.
- To assist implementing agencies in putting policy and project decisions into effect in a timely fashion, with adequate consideration of environmental, social, fiscal, and economic impacts and with adequate opportunity for participation by other agencies, local governments, and the public.
- To assist implementing agencies in assigning priorities to transportation activities in a manner consistent with the region's needs and resources.
- To maintain compliance by the Boston Region MPO with the requirements of the Transportation Equity Act for the 21st Century (TEA-21), the Americans with Disabilities Act (ADA), and the Clean Air Act (CAA).

THE UPWP PROJECT SELECTION PROCESS

Each year the MPO considers projects for inclusion in the annual update of the UPWP. This year, after determining which projects in the fiscal year 2003 UPWP would be carried forward into the new UPWP, CTPS reviewed the Regional Transportation Plan and recommendations of the Congestion Management System to generate potential new UPWP projects to be considered by the UPWP Committee of the MPO's Transportation Planning and Programming Committee. In addition, during April and May, the Metropolitan Area Planning Council sponsored eight transportation visioning sessions that were held at their monthly subregional meetings. These sessions also generated a list of potential projects for the committee's consideration.

These lists of potential projects were also presented at four public workshops, sponsored by the MPO, to solicit guidance in project selection, not only for the Unified Planning Work Program, but also for the Regional Transportation Plan and the Transportation Improvement Program. The workshops, which were held in Boston, Framingham, Quincy, and Wakefield, were announced in the MPO's newsletter, *TRANSREPORT*. Press notices were sent to local newspapers in the region, and local officials were notified directly.

In addition, staff began working with the Regional Transportation Advisory Council in April both to review the process for expanding public participation in developing MPO certification documents and to identify ways of improving the UPWP.

Following the conclusion of the workshop series, staff reported workshop comments to the UPWP Committee, which then selected projects for possible inclusion in the fiscal year 2004 document to be recommended to the Transportation Planning and Programming Committee. The following are the state and federal guidelines that must be considered when developing the UPWP.

Consistency with Federal Planning Regulations

(1) The Transportation Equity Act for the 21st Century (TEA-21)
This legislation requires MPOs to carry out the 3C process. Activities the MPO must perform to meet this requirement are:

- Production of the Regional Transportation Plan, the Transportation Improvement Program, and the Unified Planning Work Program.
- Establishment and oversight of the public participation process.
- Maintenance of transportation models and data resources to support air quality conformity determinations as well as long-range and short-range planning efforts.

Consistency with Other Legislative Requirements

(2) Title VI of the 1964 Civil Rights Act and Executive Order 12898

Executive Order 12898, dated February 11, 1994, expands on Title VI of the 1964 Civil Rights Act. It requires each federal agency to achieve environmental justice by identifying and addressing any disproportionately high and adverse human health or environmental effects, including interrelated social and economic effects, of its programs, policies, and activities on minority or low-income populations. On April 15, 1997, the U.S. Department of Transportation issued its Final Order to Address Environmental Justice in Minority Populations and Low Income Populations. Among other provisions, this order requires programming and planning activities to:

- Explicitly consider the effects of transportation decisions on minority and low-income populations.
- Provide meaningful opportunities for public involvement by members of minority and low-income populations.
- Gather (where relevant, appropriate, and practical) demographic information such as the race, color, national origin, and income level of the populations served or affected by transportation decisions.
- Minimize or mitigate any adverse impact on minority or low-income populations.

(3) The 1990 Clean Air Act

Conformity determinations *must* be performed for capital improvement projects that receive federal funding and for those that are considered regionally significant, regardless of funding source. These determinations must show that the MPO's Regional Transportation Plans and Transportation Improvement Programs will not cause or contribute to any new air quality violations in any area, will not increase the frequency or severity of any existing air quality violations in any area, and will not delay the timely attainment of the air quality standards in any area.

Transportation control measures (TCMs) identified in the State Implementation Plan (SIP) for the attainment of air quality standards are federally enforceable and *must* be given first priority when using federal funds. Such projects include parking freeze programs in Boston and Cambridge, statewide rideshare regulations, rapid transit and commuter rail extension programs, park-and-ride facilities, residential parking sticker programs, and high-occupancy-vehicle projects.

(4) The Americans with Disabilities Act

Title III of the Americans with Disabilities Act requires all transportation projects, plans, and programs to be accessible to people with disabilities. At the MPO level, this means that public meetings must be held in accessible buildings and MPO materials be made available in accessible formats.

Consistency with Federal Planning Emphasis Areas

Each year the Federal Transit Administration and Federal Highway Administration identify planning emphasis areas to promote priority themes for consideration, as appropriate, in the transportation planning process.

This year, the following key planning themes have been identified:

- Safety and security in the transportation planning process.
- Integrated planning and environmental processes.
- Consultation with local officials.
- Enhancing the technical capacity of the planning processes.
- Coordination of nonemergency transportation services.

Projects specifically relating to these planning emphasis areas are identified in chapters 5 through 9. A summary of the amount of money being spent for these projects can be found on page 10-11.

Coordination with Other Planning Activities

Regional Transportation Plan

The MPO considered the degree to which a proposed UPWP project would implement the policies of the MPO's Regional Transportation Plan. The MPO also reviewed UPWP projects within the context of the recommended projects included in the Plan.

Congestion Management System Program

The Congestion Management System (CMS) program monitors transit, roadway, and park-and-ride facilities in the MPO region and identifies problem locations. Projects that help to address problems identified in the CMS report were given priority in this UPWP.

The MBTA Program for Mass Transportation

In May 2003 the MBTA adopted a new Program for Mass Transportation, which is a long-range capital plan that was approved by the MBTA Advisory Board with extensive public involvement. The PMT includes projects currently under study in the UPWP, and it also raises potential studies for the UPWP.

Feasibility Studies and Other Visioning Processes

In the development of the UPWP, the MPO also considered its ability to support feasibility studies that are currently underway as well as the projects that were suggested during the eight MAPC visioning sessions that were held around the region.

The chart on the following page depicts how the UPWP interacts with the above planning activities. In addition, this coordination is identified in the project listings shown in chapters 5 through 9.

Efficient Use of Resources

The selection of projects for the UPWP not only is coordinated with other key planning efforts, but also takes into consideration the availability of staff time at the Central Transportation Planning Staff (CTPS) and the impact of new projects on the MPO's existing work program.

Another factor influencing the outcome of project selection is the availability of funds for a project's design and construction. Projects which have design and construction funds readily available are given priority.

FUNDING THE PROJECTS

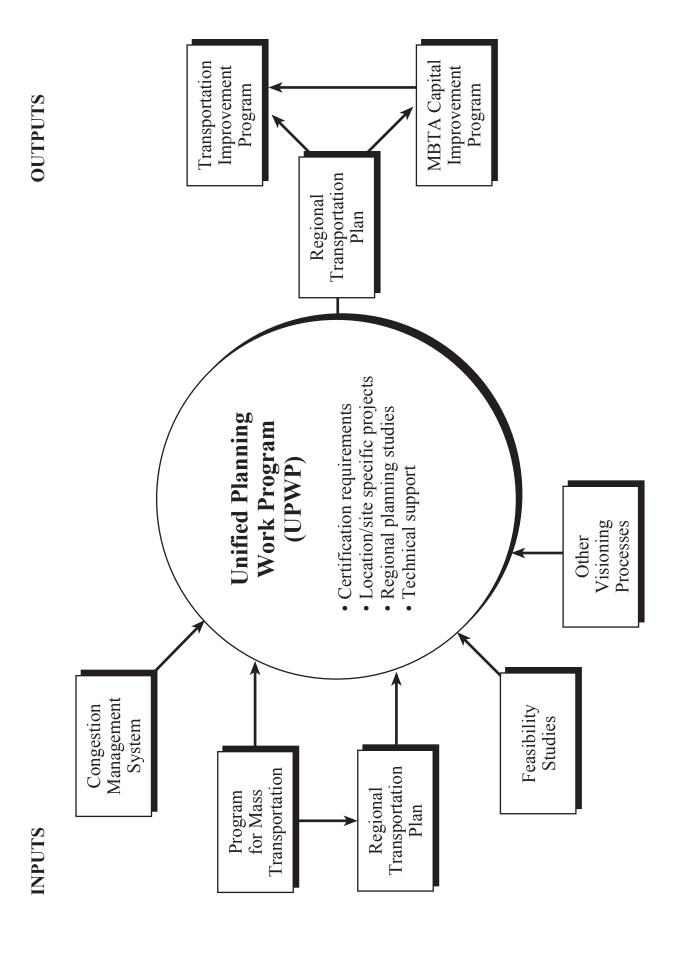
The funding for the projects included in this UPWP (presented in chapters 5 through 9) comes from a variety of federal and state sources that are described below. The source of funds has important implications with regard to the agency or organization responsible for programming them as well as the MPO's vote to endorse both the document and subsequent work scopes implementing it. The purview of the MPO's vote is included in each of the funding descriptions.

FHWA 3C PL These are Federal Highway Administration (FHWA) planning funds distributed to MassHighway, according to an allocation formula established by federal legislation, to carry out the 3C planning process (3C PL). MassHighway distributes these funds to Massachusetts MPOs according to a formula based on population. The fiscal year 2004 3C PL allocation for the Boston MPO is \$2,044,000. The MPO votes on both the use of funds and the use of MPO staff for projects in this funding category.

FHWA/MassHighway SPR As in the case of 3C PL funds, FHWA provides State Planning and Research (SPR) funds to MassHighway according to a distribution formula. MassHighway uses these funds to carry out planning and research projects throughout the state. This UPWP contains only those SPR projects to be conducted in the Boston MPO region. However, MassHighway provides a complete listing of how these funds are distributed statewide in a document called the SPR Transportation Planning Work Program. This UPWP programs \$1,157,000 in SPR funds for projects to be conducted by MPO staff. The MPO's role is to approve use of MPO staff for projects in this category and to make recommendations on work scopes implementing them. The MPO's role in these projects is crucial to the 3C process because it provides an opportunity to coordinate projects with other work that may be going on in related areas.

FTA/EOTC and MAPC Local Match The Federal Transit Administration (FTA) provides 3C planning funds for transit projects to MPOs under Section 5303 of the Federal Transit Act. These funds require a local match, are distributed according to an allocation formula, and are administered by the Metropolitan Area Planning Council. The allocation in this UPWP, including the total local match, is \$1,493,300 for projects to be conducted by MPO staff. Included in this total match is MAPC's contribution of \$44,800. As with the FHWA 3C PL/SPR funds, the MPO votes on both the use of these funds and the use of MPO staff on projects in this category.

Relationship of UPWP to Other Transportation Planning Documents



MBTA The MBTA provides \$802,900 in funding for this UPWP for projects to be conducted by MPO staff. As in the case of the SPR funds described above, the MPO's role is to approve the use of MPO staff time for these projects and to make recommendations on the work scopes implementing them.

Other Lastly, this UPWP programs \$82,300 in funding from other sources for work being conducted by MPO staff for Massport, the U.S. Department of Transportation's Volpe Center, and the City of Somerville. The MPO's role is to vote to approve the use of MPO staff time for these projects.

MONITORING THE PROJECTS

The following procedures for monitoring the projects in this UPWP have been approved by the MPO's Transportation Planning and Programming Committee:

- A project work scope must be approved by the Transportation Planning and Programming Committee prior to the start of any CTPS project activity.
- *Progress reports* on all active projects must be submitted to the funding agency by the recipient agency at least quarterly. The reports must include the following information for each project:
 - The objectives that had been set for each reporting period.
 - The accomplishments of the period.
 - Any objectives that were not met, including the reasons why and the impact on the project and related projects.
 - Any change to the scope, the amount of additional funding necessitated by the change, and the proposed funding source.
 - The percentage of the project's work scope completed and the percentage of the project's budget expended.
- Final Transportation Planning and Programming Committee approval for release of each project will be based on whether the objectives as stated in the work scope were met, whether the stated deliverables were produced, and whether the project schedule and budget were adhered to.

AMENDMENTS AND ADJUSTMENTS TO THE UPWP

Amendments may be made to the document when necessary throughout the year, with the advice of the Regional Transportation Advisory Council (the MPO's public advisory body) and the endorsement of the MPO. If an amendment is under consideration, the Advisory Council and other interested parties, including any affected communities, will be notified. Legal notice will be placed in the region's major newspapers and posted on the MPO's Web site at least thirty-five days in advance of MPO action. Citizens may attend and comment at Transportation Planning and Programming Committee and MPO meetings at which amendments are discussed. UPWP amendments are very rare and are only likely to occur in the event of an emergency or to take advantage of an extraordinary funding opportunity.

Adjustments to the UPWP may be made after notice in the region's major newspaper and posting on the MPO's Web site 15 days in advance of Transportation Planning and Programming Committee action, unless the process is modified by the committee. The abbreviated public process allows the MPO to get a necessary project underway as quickly as possible.

3 STATUS OF FISCAL YEAR 2003 UPWP PROJECTS CONDUCTED BY BOSTON MPO PLANNING STAFF

This chapter provides a status report on the implementation of the fiscal year 2003 UPWP. Since MPO approval of the document in September 2002, projects were conducted by the Boston Region MPO's Central Transportation Planning Staff (CTPS) and the Metropolitan Area Planning Council on behalf of the MPO. For the purposes of this status report, these projects fall into four categories:

- *Completed* These are projects that are either complete at the time of this writing or are expected to be complete by October 1, 2003, when this document goes into effect.
- Continuing This is one of two categories of projects that will be continuing from fiscal year 2003 or a previous year into fiscal year 2004 (the other category is "ongoing"—see below). In this category are planning studies that have specific start and end dates. The percentage complete as of October 1, 2003, for these projects is included in the project descriptions presented in chapters 7 through 10.
- *Inactive* No CTPS work proceeded on the MBTA Commuter Rail Capacity Needs Assessment, the New Bedford Fall River Commuter Rail Environmental Impact Report, the North/South Rail Link Environmental Impact Report, or the Routes I-95/1/114 Interchange Study. However, the MBTA will be conducting a commuter rail capacity needs assessment (see Appendix A).
- Ongoing These projects support and continue the transportation planning process from year to year and thus have no starting or ending date.

The tables on the following pages list projects by the categories in which they fall. Following the tables is a complete listing of MPO work products resulting from the fiscal year 2003 UPWP. Information is provided on how to obtain copies of technical reports approved by the MPO's Transportation Planning and Programming Committee.

COMPLETED PROJECTS

	MPO Highway (3C PL)	Mass- Highway (SPR)	MPO Transit (§5303)	MBTA	Other	Total
Assistance to MassHighway Operations		25,000				25,000
Environmental Justice Systems-Level Analysis	114,900		35,100			150,000
MBTA Bus Service Data Collection II				45,000		45,000
Needham and Newton Traffic Impact Study	60,000					60,000
North Suburban Shuttle Bus Opportunities			6,000			6,000
Program for Mass Transportation				94,000		94,000
Route 109 Corridor Study in the TRIC and SWAP Subregions	10,000					10,000
Route 128 Interchanges from Beverly to Gloucester – Traffic Operations Analysis		10,000				10,000
Route 53 Corridor Transportation Plan		40,000				40,000
Silver Line Phase I Service Data Collection				35,900		35,900
Suburban Transit Opportunities and Passenger Survey			75,000			75,000
Water Transportation Study					44,000	44,000
Subtotal	\$184,900	\$75,000	\$116,100	\$174,900	\$44,000	\$594,900

CONTINUING PROJECTS

	MPO Highway (3C PL)	Mass- Highway (SPR)	MPO Transit (§5303)	MBTA	Other	Total
2002–2003 Route I-93 North and Southeast Expressway HOV Lane Monitoring		26,000				26,000
Assembly Square, Somerville, Station Feasibility Study Braintree Split (I-93 South and Route 3 South, Braintree & Quincy) Reconnaissance Study & Operational Assessment		105,000				105,000
Executive Order 418 Implementation Fitchburg Service Expansion Study Support				14,800		14,800
Green Line Extension to Medford			100,000			100,000
MAGIC Subregional Area Study, Phase II	75,000					75,000
Massport Ground Access, Regional Transportation and Air Quality Studies						
MBTA Bus Service Data Collection III				297,300		297,300
MBTA Section 15 Data – 2003 Directly Operated Bus				54,800		54,800
MBTA Section 15 Data -Purchased Motor Bus Service				36,200		36,200
Night Owl Service Data Collection				17,500		17,500
North Shore Improvements MIS/DEIS – Revere to Salem Corridor				38,000		38,000
Program for Mass Transportation -Generated Studies			95,600			95,600
Red Line-Blue Line Connector				45,500		45,500
Route 128, Danvers to Reading, Existing Conditions Study		100,700				100,700
Route 28 Corridor Study, Cambridge-Somerville-Medford		150,000				150,000

CONTINUING PROJECTS

	MPO Highway (3C PL)	MPO Mass- Highway Highway (3C PL) (SPR)	MPO Transit (§5303)	MBTA	Other	Total
Route I-93/I-95 Woburn/Reading Interchange Alternatives		10,000				10,000
Testing of T2 Traffic Assignment Software					23,500	23,500
Top 1000 Traffic Accident Locations		100,000				100,000
Urban Ring Environmental Impact Report, Phase II				143,000		143,000
Subtotal	\$75,000	\$491,700	\$75,000 \$491,700 \$195,600 \$647,100 \$23,500 \$1,432,900	\$647,100	\$23,500	\$1,432,900

INACTIVE PROJECTS

	MPO Highway (3C PL)	Mass- Highway (SPR)	MPO Transit (§5303)	MBTA	Other	Total
Commuter Rail Capacity Needs Assessment (Work will be conducted by MBTA consultant. See Appendix A.)				29,800		59,800
New Bedford/Fall River EIR Support				7,000		7,000
North/South Rail Link EIR Support				14,000		14,000
Route I-95/1/114 Interchange Study		30,000				30,000
Subtotal		\$30,000		\$80,800		\$110,800

ONGOING PROJECTS

	MPO Highway (3C PL)	Mass- Highway (SPR)	MPO Transit (§5303)	MBTA	Other	Total
3C Planning Process and Public Outreach Activities	398,400		121,600			520,000
Air Quality Conformity Determinations	19,900		6,100			26,000
Air Quality Support Activities	38,300		11,700			50,000
Bicycle/Pedestrian Studies	50,000					50,000
Computer Resource Management	238,400		79,500			317,900
Congestion Management System (CMS) Monitoring Program	236,100					236,100
Data Resources Management	240,500		80,100			320,600
Direct Support	000,96	40,000	51,000	45,800		232,800
Disability Access Support	37,500		62,500			100,000
Environmental Justice Committee Support	23,000		7,000			30,000
EOTC §5303 Local Match to CTPS Projects					150,800	150,800
General Development and Planning Activities	25,000					25,000
GIS Support for Land Use Transportation Issues	14,200		12,200			26,400
GIS Technical Support of Ongoing MassHighway Projects		10,000				10,000
Intermodal Freight Planning Studies		30,000				30,000
Land Use Development Project Reviews	48,000		44,800			92,800
Mobility Assistance Program and §16(b)(2) Review			10,000			10,000
Monitoring Disadvantaged Business Enterprise (DBE)			15,000			15,000

	MPO Highway (3C PL)	Mass- Highway (SPR)	MPO Transit (§5303)	MBTA	Other	Total
MPO/MAPC Liaison and Support Activities	133,800		32,600			166,400
Planning Assistance to MassHighway		270,500				270,500
Public Information and Coordination Activities	13,200		2,000			15,200
Regional Growth-Transportation Land Use Analysis	76,400		34,600			111,000
Regional Model Enhancement	50,000	317,000	100,000			467,000
Study Refinements	6,000	20,000	2,000			28,000
Subregional Support Activities	77,000		34,600			111,600
Transportation Enhancement and Transportation Demand Management Programs	53,000		27,500			80,500
Transportation Fact Book Update		15,000				15,000
Transportation Improvement Program	91,900		28,100			120,000
Transportation Improvement Program—Support	25,000		14,300			39,300
Transportation Plan	209,800		64,100			273,900
Travel Data Forecasts	10,000		25,000			35,000
Travel Operations Analysis			17,000			17,000
Unified Planning Work Program	52,100		12,900			65,000
Subtotal	\$2,263,50	\$702,500	\$896,200	\$45,800	\$150,800 \$	\$4,058,800
== Total	\$2,523,400 \$1,299,200 \$1,207,900	\$1,299,200	\$1,207,900	\$948,600	\$218,300 \$6,197,400	6,197,400

MPO WORK PRODUCTS OF THE FISCAL YEAR 2003 UPWP

Listed below are the technical reports, memoranda, and other MPO work products that were associated with the projects in the fiscal year 2003 UPWP. Memoranda and "other work products" are produced for the client agency's in-house use only. Reports and certification documents, however, are available at the State Transportation Library. They may also be requested by contacting CTPS at (617) 973-7100 (voice), (617) 973-7089 (TDD), or bostonmpo@ctps.org (e-mail).

MPO Certification Documents

2003 Unified Planning Work Program

2003–2008 Transportation Improvement Program Amendments

2003–2008 Transportation Improvement Program and Determination of Air Quality Conformity

CTPS Technical Reports

A Feasibility Analysis of Safety and Operational Improvements at Eleven Route 128 Interchanges in Beverly, Wenham, Manchester-by-the-Sea and Gloucester

MassHighway Park-and-Ride Lot Inventory

MBTA Program for Mass Transportation

Needham/Newton Traffic Impact Study (pending)

Route 2 Improvements from Route 111 in Acton to Baker Avenue in Concord

Route 109 Corridor Planning Study

Traffic Congestion in the Southwest Advisory Planning Subregion

Route 53 Corridor Transportation Plan (pending)

CTPS Technical Memoranda (listed by subject)

Congested Signalized Intersections Analysis of the North Shore Task Force Subregion

Congested Signalized Intersections Analysis of the Three Rivers Interlocal Council Subregion

North Suburban Transit Opportunities, Phase I

Ridership and Passenger-Mile Estimates for Fiscal Year 2002 National Transit Database: Purchased Motor Bus

Ridership and Passenger-Mile Estimates for Fiscal Year 2002 National Transit Database: Directly Operated Services and Commuter Rail Passenger-Mile Calculations

Other CTPS Work Products

Access Boston 2000–2010 Study support activities

Accessible formatting of the Transportation Improvement Program and amendments, of the Unified Planning Work Program, and of meeting minutes and handouts of the Regional Transportation Advisory Council and Access Advisory Committee to the MBTA

Environmental justice measures, public outreach, and analysis

Maintenance of the Boston MPO Web site (www.bostonmpo) and the CTPS intranet site

Geographic information system (GIS) maintenance and support

GIS maps, computer map files, consolidated and coherent databases, data analyses, and responses to data requests

Massport ground access and air quality study support

MAGIC Subregional Area Study, Phase II activities

MBTA bus trip summaries, load profiles, and other summary tables from winter, spring, and fall 2002 and 2003 data collection efforts.

MBTA Silver Line Phase I trip summaries, load profiles, and other summary tables for the line's first year of operation.

Mobility Assistance Program and Section 16(b)(2) grant application evaluations and guidance to program participants

MPO Transportation Planning and Programming Committee, Regional Transportation Advisory Council, and Access Advisory Committee to the MBTA (AACT): meeting minutes, staff support, and database maintenance

National Transportation Week display materials

North Suburban Shuttle Bus Opportunities Study activities

Partners in Transportation diversity posters

Revised guidelines and computerized templates for production of CTPS memoranda, letters, and work scopes

Ridership projections for "Water Transportation Planning for Eastern Massachusetts: A Strategic Assessment of Passenger Ferry Services," a report produced by the Executive Office of Transportation and Construction

Route I-95/1/114 Interchange Study support work

Route 53 Corridor Transportation Plan support work

Route 109 Corridor Study support work

South Boston Piers Transitway Supplemental EIR support activities

South Weymouth Naval Air Station Study support

T2 traffic assignment software testing

Transportation Plan Update support work

Travel demand forecasting

TRANSREPORT, the MPO's monthly newsletter

Work scopes for Transportation Planning and Programming Committee approval

MAPC Work Products

Creation of a GIS coverage and related database of MAPC-reviewed projects and their mitigation commitments

Database development of community, subregion and corridor population and employment, and visual displays and analysis of this information

GIS technical assistance and support for transportation planning in the region

Implementation of the Statewide Bicycle and Pedestrian Plan, and work on bicycle/pedestrian-related issues, including coordination with relevant national, state, and regional organizations

Interagency coordination, work scopes, participation in advisory and corridor committees, public participation, fiscal year 2004 MPO elections, and attendance at relevant meetings

List of transportation projects identified through the public participation process for the Regional Transportation Plan

Participation in a variety of specific project reviews and related activities

Project evaluations and development of new project evaluation new tools

Provision of information to the MAPC Executive Committee, MAPC officers, and MAPC subregional groups on MPO transportation activities and issues

Preparation of monthly meeting agendas, coordination with transportation agencies, traffic study reviews, reports to the Transportation Planning and Programming Committee, subregion and corridor advisory committee meeting support, and prioritization assistance

Support and technical assistance in developing and implementing the MPO's Regional Suburban Mobility Improvement Program

Support for the regional TDM and Transportation Enhancement Selection Committees

Support to TIP criteria refinement and implementation and to subcommittee

Technical assistance to the Congestion Mitigation/Air Quality, Enhancement, and Mobility Assistance Programs

4 INDEX OF PROJECTS BY AGENCY

This chapter indexes the projects by the agency responsible for leading the work effort. The index is intended both to facilitate finding specific projects in this document and to provide a summary of what parts of this planning program each agency is conducting.

Academic Institutions	Page #
Region One University Transportation Center Research Program	A-5
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2002-2003 Route I-93 North and Southeast Expressway HOV Lane Monitoring	8-3
2004-2005 Route I-93 North and Southeast Expressway HOV Lane Monitoring	8-4
3C Planning Process and Public Outreach Activities	6-2
Air Quality Conformity Determinations	6-5
Air Quality Support Activities	6-6
Assembly Square, Somerville, Station Feasibility Study	7-3
Assistance to MassHighway Operations	9-4
Bicycle/Pedestrian Studies	8-5
Braintree Split (I-93 S & Route 3 South) Reconnaissance Study	
and Operational Assessment	8-6
Computer Resource Management	5-3
Congestion Management System (CMS) Monitoring Program	8-7
Data Resources Management	5-5
Direct Support	5-7
Disability Access Support	6-8
Environmental Justice Committee Support	6-9
Environmental Justice Recommended Studies	6-10
Executive Order 418 Implementation	8-8
Fitchburg Service Expansion Study Support	7-4
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MAGIC Subregional Area Study, Phase II	7-5
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MBTA 2004 National Transit Database - Directly Operated Bus	9-8
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MBTA Bus Service Data Collection III	9-10
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MBTA Section 15 Data 2003 - Directly Operated Bus	9-13
MBTA Section 15 Data 2003 - Purchased Motor Bus Service	9-14
Mobility Assistance Program and 16(b)(2) Review	9-15
Night Owl Service Data Collection	9-16
North Shore Improvements MIS/DEIS - Revere to Salem Corridor	8-13
North Suburban Shuttle Bus Opportunities, II	7-6
Planning Assistance to MassHighway	9-17
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Regionwide Suburban Transit Opportunities Study, II	8-16
Route 128, Danvers to Reading, Existing Conditions Study	7-8
Route 28 Corridor Study, Cambridge-Somerville-Medford	7-9
Route I-93/I-95 Woburn/Reading Interchange Alternatives	7-10
Routes 1A, 114, and 107 in Salem and Beverly	7-11 9-19 8-17 7-12
Silver Line, Phase II, Before and After Study	
Silver Line Service, Phase III, Ridership Forecasts	
South Shore Coalition Subregional Study	
Study Refinements	9-20
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Top 1000 Traffic Accident Locations	9-22
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Transportation Improvement Program-Criteria	6-16
Transportation Improvement Program-Fiscal Years 2004-09	6-17
Transportation Improvement Program-Information Flow	6-19
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Urban Ring Environmental Impact Report, Phase II	8-18
City of Somerville	Page #
Assembly Square Orange Line Station	A-2
Executive Office of Transportation & Construction	Page #
Monitoring Disadvantaged Business Enterprise (DBE)	6-11
Executive Office of Transportation & Construction/MassHighway Executive Order 418 Implementation	Page # A-2

MassHighway	Page #
I-93/I-95 Interchange, Woburn/Reading	A-3
Intelligent Transportation Systems Development and Implementation	A-3
Route 129/I-93 Interchange, Wilmington	A-5
MBTA	Page #
North Shore Major Investment Study (MIS) and Draft Environmental Impact	A-4
Statement (DEIS)	
Urban Ring Environmental Impact Report, Phase 2	A-6
Metropolitan Area Planning Council	Page #
Alternative Mode Planning and Coordination	9-2
General Development and Planning Activities	9-4
Land Use Development Project Reviews	8-11
MPO/MAPC Liaison and Support Activities	6-12
Regional Growth-Transportation Land Use Analysis	8-14
Subregional Support Activities	6-15
Transportation and Community and Systems Preservation (TCSP)	A-6
Transportation Improvement Program-Support	6-20
Unified Planning Work Program	6-22

5 ADMINISTRATION AND RESOURCE MANAGEMENT PROJECTS

Chapters 5 through 9 are comprised of project descriptions and budget information about transportation planning work efforts that will be carried out between October 1, 2003, and September 30, 2004. The activities in these chapters will be conducted by the Central Transportation Planning Staff (CTPS) of the Boston Region Metropolitan Planning Organization's or by the Metropolitan Area Planning Council.

These work efforts are listed by the following categories:

- Chapter 5 Administration and Resource Management
- Chapter 6 Certification Requirements
- Chapter 7 Location/Site Specific Studies
- Chapter 8 Regional Planning Studies
- Chapter 9 Technical Support

As described in chapter 2, the projects in the UPWP are funded from a variety of federal and state sources. Each project description identifies the project's funding source or sources. With respect to funding, there are two types of projects in these chapters:

- Projects funded with federal 3C planning funds, to be carried out by the MPO staff or other agencies acting on behalf of the MPO. The MPO programs these funds and approves the use of staff time.
- Projects funded from other sources, both state and federal, to be carried out by the MPO staff for an individual transportation agency. The MPO approves the use of MPO staff time on these projects and provides guidance to the implementing entities on their coordination with other planning efforts.

In reviewing the project listings, it is important to remember that the transportation planning process is a coordinated effort often carried out simultaneously by several agencies. For example, the MBTA may hire a consultant to prepare an environmental impact report for a transit project; CTPS may provide the travel demand and air quality modeling for the consultant and MAPC may perform land use analysis. Thus, if the same project is mentioned in more than one place in the following chapters it is because of this kind of interagency coordination. To help clarify the distinctions between the various work efforts, cross-referencing is provided where appropriate to show the interrelationship among projects.

The projects are as follows:

Project #	Project Name	Page #
60400-60492	Computer Resource Management	5-3
60110-6060	Data Resources Management	5-5
90000	Direct Support	5-7

COMPUTER RESOURCE MANAGEMENT



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 60400-492

STATUS: Ongoing PROJECT BUDGET: N/A*

The MPO signatory agencies have made staff assignments to CTPS to improve and maintain state-of-the-practice computer resources. Tasks are identified by CTPS and by signatory agency staff and priorities are set in accordance with the schedules and analytical requirements. The variety of tasks encompassed by this work are grouped within the following categories.

60415 Computer Room Management: Plan, monitor, and maintain computer room space and facilities.

60425 Desktop and Computer Hardware/Software Acquisition and Maintenance: Purchase and maintain CTPS's desktop, laptop, and handheld computer hardware, systems and applications software, as well as any other equipment that supports single-user computers. CTPS will also purchase maintenance contracts where appropriate.

60430 Software Development: Create new computer procedures that support CTPS's analytical, administrative, and documentation tasks. Maintain and enhance computer procedures developed by CTPS or by others where program maintenance and enhancement are no longer available from the original vendor.

60435 Server Hardware and Software Acquisition and Maintenance: Purchase and maintain Unix- and Windows-based server hardware and systems and application software as well as any other equipment that supports the use of servers. Also acquire maintenance contracts where appropriate.

60445 Network and Communication Equipment Acquisition and Maintenance: Purchase and maintain all off CTPS's network an communications software as well as any other equipment that supports the use of network and communications equipment, including the acquisition and maintenance of CTPS's Internet service. Also acquire maintenance contracts where appropriate.

60455 System Administration: Manage and maintain hardware and software resources for all CTPS computer systems so as to ensure that staff have maximum access to the equipment they need. Increased emphasis will be given to the security and integrity of all hardware, software and data resources.

60465 Staff Assistance and Training: Assist staff in the use of computer resources, organize and distribute vendor-supplied manuals, and where appropriate provide written and on-line user guides for particular resources.

60470 Liaison with Other Agencies: CTPS will work with other public agencies and with MAPC to encourage appropriate sharing of computer resources and techniques.

60480 Acquisition of Computer Supplies: Purchase consumable computer-related items and supplies as well as permanent equipment that is not required to meet complicated technical specifications.

60492 Computer Resource Planning: CTPS maintains a permanent planning process to set direction and priorities for the development of computer resources. The Five-Year Plan for

COMPUTER RESOURCE MANAGEMENT (CONT.)



CLIENT: Boston Metropolitan Planning Organization ID #: 60400-492

STATUS: Ongoing PROJECT BUDGET: N/A*

computer resource development will be updated in coordination with the development of the CTPS budget for the next fiscal year.

FY 2004 Activities and Expected Work Products Work on these projects will continue as described above.

FHWA/FTA Grant Application Task and Element: 44.23.04

Fu	Funding Recipient			Funding Source						
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other		
317,900			317,900	238,400		79,500				

^{*} Not applicable for ongoing work efforts.





STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 60110-600

STATUS: Ongoing PROJECT BUDGET: N/A*

The MPO Transportation Planning and Programming Committee has made CTPS staff assignments to improve its capability of providing travel data and analyses at the regional, corridor, and site-specific levels. The variety of tasks encompassed by this work may be grouped within the following categories:

60110 Resources Management: CTPS will maintain and improve a database that includes census data; updated travel, infrastructure, and service data; and products of CTPS analysis. CTPS will continue to refine the database for its geographic information system (GIS), obtain and process newly available year 2000 census, land use, statewide digital ortho-photography, and other data as they become available. A collection of available historical, transportation, land use, and socioeconomic data will also be compiled.

60120 Travel Data: Travel data information on travel patterns within the region will be processed and analyzed. Data handled as part of this project include, but are not limited to, ridership survey data, traffic counts, ridership counts, and crash data.

60130 Socioeconomic Data: Year 2000 census data, including journey-to-work and other population, employment, and household characteristic data, will be processed and analyzed for CTPS studies. As various files become available, CTPS will continue to process census data into traffic zone, community, and corridor summaries and to analyze patterns indicated by historical changes. Web-enabled software and other technical tools to enhance data extraction, analysis, and presentation will be also be developed.

60140 Miscellaneous Data: Data coming from CTPS surveys and other sources on subjects such as land use, local zoning regulations and other geographic factors, vehicle registration, and transit service will be processed and analyzed.

60201 Response to Data Requests: Data will be processed or analyzed upon request to meet the needs of local, state, and federal government agencies and private institutions and firms. 60600 Graphic Information System /Database Management System (GIS/DBMS): CTPS will continue to develop databases for use with its GIS/DBMS. CTPS will also coordinate database development and data distribution with other state transportation agencies in order to prevent duplication of effort, ensure data quality, and reduce costs. The GIS/DBMS software capabilities will be made available to additional staff through training programs and the development of web-enabled software applications. Assistance will also be given in identifying aspects of MPO work that can benefit from specific GIS/DBMS capabilities.

FY 2004 Activities and Expected Work Products: GIS maps, computer map files, consolidated and coherent databases, data analyses and responses to data requests.

DATA RESOURCES MANAGEMENT (CONT.)



CLIENT: Boston Metropolitan Planning Organization ID #: 60110-600

STATUS: Ongoing PROJECT BUDGET: N/A*

FHWA/FTA Grant Application Task and Element: 44.23.04

Fu	nding Recip	Recipient			Funding Source			
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
320,600			320,600	240,500		80,100		

^{*} Not applicable for ongoing work efforts.

DIRECT SUPPORT



STAFF: Central Transportation Planning Staff

CLIENT: Boston MPO/MassHighway/MBTA ID #: 90000

STATUS: Ongoing PROJECT BUDGET: N/A*

CTPS Direct Support provides integral support to all CTPS projects and functions in the following areas:

Computer Equipment: CTPS computer needs are programmed in the "CTPS Five-Year Plan for Computer Resource Development," as amended.

Consultants: Some of the work planned in this UPWP may require the expertise of private consultants who will be responsible to and will report to individual project managers.

Office Equipment: Office equipment that supports transportation-related projects is a direct-support expenditure.

Travel: Periodically, the U.S. Department of Transportation (the Federal Highway and Federal Transit Administrations) and other organizations sponsor courses and seminars that enhance the ability of staff to do project work; the costs of registration, travel, and living accommodations associated with attending such programs are direct support expenditures. Mileage expenses associated with project work are also charged as direct-support expenditures; however, these expenditures do not require prior approval.

Other Miscellaneous: There are various expenditures that can arise over the term of this UPWP such as printing, postage, and data processing services. These expenditures can become necessary when producing a project report or conducting a survey to obtain data that are sufficiently current and project-specific. The costs associated with printing survey forms, postage for return mail, and services for preparing and processing data for specific projects are direct-support expenditures.

FY 2004 Activities and Expected Work Products: Computer and general office equipment, professional consultant services, in-state project-related travel, out-of state travel associated with staff attendance at professional and training conferences.

FHWA/FTA Grant Application Task and Element: 44.27.01

Funding Recipient				Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other	
162,000			162,000	67,500	58,200	29,800	6,500		

^{*} Not applicable for ongoing work efforts.

6 CERTIFICATION REQUIREMENTS

The projects in this chapter are categorized as Certification Requirements because they include work that the MPO must do to maintain its certification by the Federal Highway Administration and the Federal Transit Administration. They also include activities that are necessary for compliance with federal and state laws such as the Clean Air Act and the Americans with Disabilities Act. The projects in this category are:

Project #	Project Name	Page #
90011-090	3C Planning Process and Public Outreach Activities	6-2
10112	Air Quality Conformity Determinations	6-5
90061	Air Quality Support Activities	6-6
90024&028	Disability Access Support	6-8
11127	Environmental Justice Committee Support	6-9
TBD	Environmental Justice Recommended Studies	6-10
EOTC 1	Monitoring Disadvantaged Business Enterprise (DBE)	6-11
MAPC 1	MPO/MAPC Liaison and Support Activities	6-12
11244	Regional Model Enhancement	6-14
MAPC 2	Subregional Support Activities	6-15
10103.2	Transportation Improvement Program: Criteria	6-16
10103.1	Transportation Improvement Program: Fiscal Years 2004–09	6-17
10103.3	Transportation Improvement Program: Information Flow	6-19
MAPC 3	Transportation Improvement Program: Support	6-20
10101	Transportation Plan	6-21
10104	Unified Planning Work Program	6-22

3C PLANNING PROCESS AND PUBLIC OUTREACH ACTIVITIES

STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 90011-090

STATUS: Ongoing PROJECT BUDGET: N/A*

The following projects are called 3C activities because they support the federally mandated *continuing, coordinated, and cooperative* transportation planning process.

Public Outreach Activities

CTPS will work to coordinate and assist the MPO in public outreach activities, increasing its efforts related to preparation, explanation, and distribution of MPO documents, reports, and publications. This will be accomplished by:

- Providing in-house public participation support throughout CTPS and to MPO member organizations.
- Increasing direct contact with local communities to learn about transportation needs, proposed projects, and other issues that have implications for the MPO planning process.
- Implementing the MPO Public Participation Procedures, preparing and distributing new informational materials.

Current public outreach activities are described below.

90026 Public Participation Process: (\$149,800) The MPO and CTPS will implement the Public Involvement Program adopted in 2002 and continue to review and modify procedures as appropriate to increase the program's effectiveness. This may call for additional activities, forums, and studies, including developing recommendations for improvements to the Web site and preparation and distribution of printed materials.

90011 Support to the MPO and Its Subcommittees: (\$242,000) Support includes developing agendas for meetings, preparing background materials, compiling the meeting package for mailing, recording minutes of meetings, and maintaining mailing lists. CTPS conducts liaison activities among the Boston MPO and other state MPOs and agencies regarding MPO plans, policies, and funding. Staff provides support to members of the MPO, including outreach and education assistance and other coordination assistance. CTPS also provides support to the MPO by researching and analyzing 3C planning issues, preparing information for project decision-making, analyzing work priorities, and providing day-to-day management of projects listed in the UPWP.

90021 Regional Transportation Advisory Council Support: (\$35,000) The Regional Transportation Advisory Council is the MPO's citizen advisory committee. CTPS provides support to this body and its subcommittees. This includes preparing agendas, minutes, and meeting summaries, scheduling speakers, maintaining mailing lists, and producing and distributing meeting notices and packages. CTPS also supports the Advisory Council by researching and analyzing 3C planning issues and particular topics of interest and concern to the Advisory Council. The CTPS Certification Activities group works to ensure coordination among Advisory Council activities and those of Access Advisory Committee to the MBTA (AACT), the MPO's Transportation Planning and Programming Committee, the MPO, and other regional agencies and committees.

3C PLANNING PROCESS AND PUBLIC OUTREACH ACTIVITIES (CONT.)

STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 90011-090

STATUS: Ongoing PROJECT BUDGET: N/A*

90025 TRANSREPORT: (\$56,200) TRANSREPORT is the newsletter of the MPO and is an important part of the MPO's public information program. CTPS is responsible for soliciting articles and managing all aspects of production: writing and editing, layout, graphics, proofreading, and printing. CTPS coordinates the participation of MPO agencies and other interested organizations in the development of articles and is responsible for the newsletter's distribution in standard print, accessible formats and electronic-transfer formats.

90027 Boston Region MPO Web Site www.bostonmpo.org: (\$75,000) The MPO's Web site provides the public, federal, state and local officials, and businesses further access to the MPO and to transportation planning information. CTPS continues to identify documents and data items that are suitable for the site, monitors its use, keeps track of feedback, and performs necessary updating and maintenance of files. CTPS will continue to work to improve the design and navigability of the site, and will make aggressive use of the site in public outreach efforts.

Other 3C Planning Support Activities

90012 Professional Development: (\$5,100) The Boston Region MPO staff maintains its technical expertise in part by staff participation in courses, programs, and workshops offered by the Federal Highway and Transit Administrations, the Transportation Research Board, the Institute of Transportation Engineers, and other public and private organizations. Previous professional development endeavors have included traffic engineering issues and applications, regional modeling, bicycle/pedestrian issues, transit planning, and air quality analysis.

90023 Document Production Standards: Editorial assistance is provided in the production of CTPS documents, and upon request, MPO agency documents. This ongoing work promotes the consistency of CTPS documents and ensures that they are well-organized, clearly written, correct in usage, and suitably formatted.

90090 General Graphics: (\$128,800) Graphics support will be provided to the CTPS staff and the MPO agencies in the design and production of maps, charts, illustrations, report covers, brochures, slides, photographs, and other graphics. One of the areas of work to which graphics support will be particularly integral is the CTPS geographic information system (GIS).

FY 2004 Work Products: MPO and Transportation Planning and Programming Committee agendas, minutes and reports; Web site expansions and maintenance; monthly issues of *TRANSREPORT*; maps and graphics for reports; public outreach materials; advice, assistance and analyses of planning issues as requested by the MPO, the MPO's Transportation Planning and Programming Committee and the Regional Transportation Advisory Council; Regional Transportation Advisory Council meeting minutes, records maintenance, and mailings; review of and revisions to CTPS document formats and CTPS Stylebook; and refinements and maintenance of public outreach databases and listserves.

3C PLANNING PROCESS AND PUBLIC OUTREACH ACTIVITIES (CONT.

STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 90011-090

STATUS: Ongoing PROJECT BUDGET: N/A*

These projects support all other projects in this UPWP.

FHWA/FTA Grant Application Task and Element: 44.21.02

Fu	nding Recip	Recipient			Funding Source			
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
691,900			691,900	484,300		207,600		

^{*} Not applicable for ongoing work efforts.

AIR QUALITY CONFORMITY DETERMINATIONS



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 10112

STATUS: Ongoing PROJECT BUDGET: Ongoing

Analysis and documentation to demonstrate plan, program, and project conformity with the 1990 Clean Air Act (CAA) are provided annually. The Boston region has been classified as a nonattainment area for the one-hour ozone standard. The city of Boston and surrounding cities and towns are classified as maintenance areas for carbon monoxide (CO). To continue receiving federal transportation funding, the region must show that, overall, the Boston region's federally funded transportation programs improve air quality in a manner consistent with the Massachusetts State Implementation Plan (SIP).

FY 2004 Activities and Expected Work Products: Conformity determinations including a detailed analysis of air quality impacts (VOCs, NOx, and CO) of the projects in the 2004 Plan and the FY 2005–2009 TIP (both highway and transit) will be performed and presented as follows:

- *System Level:* A systemwide conformity determination will be prepared for regionally significant projects in the Plan and TIP. The conformity determination will show a 2000 base year, as well as 'build' networks for 2007, 2015, and for 2025 for VOCs and NOx, and 2005, 2010, 2020, and 2025 for CO in the maintenance and nonattainment areas only.
- *Project Level:* A detailed analysis of the potential VOC, CO, and NOx impacts of each project to receive Congestion Mitigation/Air Quality Program funding in the TIP will be conducted in accordance with U.S. DOT and U.S. EPA guidelines. The specifics of the analysis will be determined through consultation between the state transportation and environmental agencies.

See the Regional Transportation Plan and TIP project listings presented in this chapter.

FHWA/FTA Grant Application Task and Element: 44.27.01

Funding Recipient				Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other	
15,000			15,000	10,500		4,500			

^{*} Not applicable for ongoing work efforts.





STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 90061

STATUS: Ongoing PROJECT BUDGET: N/A*

This project complements the Air Quality Conformity Determinations of the Transportation Plan and the Transportation Improvement Program described previously. It allows for additional support for the Boston MPO in implementing air quality related transportation programs and projects and includes consultation, research, and coordination between CTPS and other federal, state, local, and private agencies.

FY 2004 Activities and Expected Work Products:

Support to EOTC, MassHighway, Massport, and the MBTA: Activities include analysis of Transportation Control Measures (TCMs), park-and-ride facilities, proposed High Occupancy Vehicle (HOV) projects throughout the region, and evaluation of emerging and innovative highway and transit clean-air activities.

Mobile-Source Element of the State Implementation Plan (SIP): The Department of Environmental Protection (DEP) is required to submit a SIP to the federal Environmental Protection Agency documenting strategies and actions designed to bring Massachusetts into compliance with air quality standards. CTPS support efforts will include:

- Support for amendments or revisions to the Memorandum of Understanding between the MPO and the DEP.
- Continued staff support to the agencies involved in monitoring, updating, and revising the mobile-source section of the SIP.
- Analysis of existing regional air quality conditions, assistance to MassHighway and EOTC in data collection, and validation of DEP's air quality inventories and emission budgets. In addition, CTPS will evaluate long-term growth, transportation, land use, and other public policies that may affect air quality.
- Continued coordination with DEP in developing statewide rideshare and other regulations and programs that pertain to transportation and air quality.
- Support to regional, local, and private agencies.
- Continued participation in the Transportation Task Force of the SIP Steering Committee.
- Provision of data and recommendations to the MPO agencies regarding funding and implementation of air-quality-related transportation programs and projects.
- Support to MPO agencies in analyzing the air quality effects of projects during environmental justice reviews.

^{*} Not applicable for ongoing work efforts.

AIR QUALITY SUPPORT ACTIVITIES (CONT.)



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 90061

STATUS: Ongoing PROJECT BUDGET: N/A*

FHWA/FTA Grant Application Task and Element: 44.27.01

Fu	Funding Recipient			Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other	
50,000	_		50,000	35,000	_	10,000			

DISABILITY ACCESS SUPPORT



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization/MBTA ID #: 90024&028

STATUS: Ongoing PROJECT BUDGET: N/A*

The 1990 Americans with Disabilities Act (ADA) guarantees accessible services to people with disabilities in the areas of public accommodations, employment, and public transportation. CTPS supports the MPO in ADA implementation by working as a liaison both to internal staff and to MPO member agencies, ensuring that they are aware of compliance requirements.

The ADA requires government agencies to provide material that is circulated to the public to be made available in accessible formats, in a timely manner, upon request. Users specify the desired format(s), e.g., large print, Braille, audiocassette, or computer diskette, at the time of the request. CTPS staff respond to such requests by reformatting documents in the appropriate format.

In addition, CTPS staff also supports the MBTA in meeting federal requirements implementing ADA by providing ongoing support to the Access Advisory Committee to the MBTA (AACT), a user group representing people with disabilities. AACT advises the MBTA on all matters relating to the use of MBTA's fixed route and paratransit services for people with disabilities and ensures that users' ideas concerning accessible transportation are heard.

FY 2004 Activities and Expected Work Products:

- Staff support to regularly scheduled AACT and related meetings at which attendees meet to advise and comment on projects being planned or implemented systemwide for commuter rail, rapid transit, surface transit, and paratransit.
- Distribution of monthly MBTA RIDE service-provider statistics and other materials pertinent to AACT meeting agenda items.
- Preparation and distribution of full AACT meeting agendas and minutes, meeting announcements, correspondence, and meeting calendars for RIDE vans.
- Distribution of an orientation packet for new AACT members.
- Continued database maintenance of AACT mailing lists, meeting attendance, and membership standing and maintenance of AACT archives, supplies and accessible-formatting equipment
- Serving as a liaison to CTPS and MPO agencies on ADA requirements.
- Production of MPO materials in accessible formats, as requested.

This project supports MPO public outreach efforts presented in this chapter.

FHWA/FTA Grant Application Task and Element: 44.21.05

Fu	nding Recip	ient	Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
100,000			100,000	37,500		62,500		

^{*} Not applicable for ongoing work efforts

ENVIRONMENTAL JUSTICE COMMITTEE SUPPORT



CLIENT: Boston Metropolitan Planning Organization ID #: 11127

STATUS: Ongoing PROJECT BUDGET: N/A*

The primary purpose of this project is to foster environmental justice awareness in relation to the Regional Transportation Plan, the Unified Planning Work Program, the Transportation Improvement Program, the Congestion Management System, Conformity Determinations, environmental impact studies, and project-specific work products. This will be done through continued outreach to minority and low-income populations and through coordination with the the MPO's Environmental Justice Committee.

FY 2004 Activities and Expected Work Products: Staff will assist the MPO in applying adopted environmental justice measures to evaluate the achievement of the MPO's environmental justice goals. As part of this effort, staff will also:

- Monitor developments by AASHTO, AMPO, and U.S. DOT by participating in workshops, conferences, and seminars, as appropriate.
- Continue to use year 2000 census data, where available; analyze other pertinent data; and/or develop information and data through direct contact with affected populations or interest groups.
- Continue MPO outreach to minority and low-income communities.
- Continue to provide staff support to the Environmental Justice Committee. Staff will work with the committee to identify appropriate studies and measures that further environmental justice.
- Include the input of the Environmental Justice Committee in the development of the Transportation Improvement Program and the UPWP.

This work is related to the Regional Transportation Plan and project programming for the Transportation Improvement Program and the Unified Planning Work Program presented in this chapter.

FHWA/FTA Grant Application Task and Element: 44.26.04

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
30,000			30,000	21,000		9,000		-

^{*} Not applicable for ongoing work efforts.

ENVIRONMENTAL JUSTICE RECOMMENDED STUDIES



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$100,000

In consultation with the Environmental Justice Committee and building on the results of the recently completed Environmental Justice Systems-Level Analysis, CTPS staff will identify one or more areas/issues to be studied to address the concerns of low-income and minority communities. The actual issues to be studied will be developed through the Committee's consensus process.

FY 2004 Activities and Expected Work Products: A detailed work scope(s) outlining the specific tasks and products associated with this project will be presented to the Transportation Planning and Programming Committee for approval to proceed.

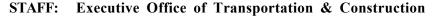
This work is related to Environmental Justice Committee work efforts described on page 6-9.

FHWA/FTA Grant Application Task and Element: 44.26.04

Fu	Funding Recipient			Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other	
100,000			100,000	70,000		30,000			

^{*} To be determined at the time of work scope development.

MONITORING DISADVANTAGED BUSINESS ENTERPRISE (DBE)



CLIENT: Boston Metropolitan Planning Organization ID #: EOTC 1

STATUS: Ongoing PROJECT BUDGET: N/A*

This project consists of the following tasks:

- Coordinate, monitor, and analyze the programs of each of the MPO member agencies.
- Conduct monthly affirmative-action meetings.
- Conduct research and analysis of regulatory and legislative mandates.
- Revise existing DBE policies and procedures to foster the continued success of the program
 and to provide for the monitoring, tracking, and documenting of activities that are in
 compliance with state and federal requirements.
- Review service contracts for compliance with state and/or federal requirements.
- Report DBE activities on a quarterly basis to state and federal agencies.
- Coordinate the state's DBE legal task force.
- Continue ongoing collaboration with other state executive offices and agencies in the refinement and implementation of successful DBE programs.
- Respond to DBE requests for technical assistance and general information.
- * Not applicable for ongoing work efforts.

FHWA/FTA Grant Application Task and Element: 44.27.01

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
	15,000		15,000			15,000		

MPO/MAPC LIAISON AND SUPPORT ACTIVITIES

STAFF: Metropolitan Area Planning Council

CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 1

STATUS: Ongoing PROJECT BUDGET: N/A*

MPO/MAPC Liaison and Support Activities: This task includes communication with the MPO, the Transportation Planning and Programming Committee, the Regional Transportation Advisory Council, and the MAPC Executive Committee and representatives. The MPO is informed of transportation issues in the communities and subregions, and information on MPO programs and projects is disseminated to MAPC, its working groups, and member communities. Meetings of the MPO organizations and committees are key to the 3C planning process. MAPC is responsible for bringing the local and subregional perspectives to those meetings. Acting in a liaison capacity, MAPC will participate in meetings with local officials, in subregional and regional meetings, and in MPO agency and project task force meetings. This task also includes transmitting work products and communicating MPO actions and programs to the MAPC Executive Committee and Council and providing support to the MPO in MAPC's capacity as Vice Chair of the Transportation Planning and Programming Committee. In the past, work to coordinate regional efforts on truck-related issues and serving on the Roadway Design Issues Group and the Program for Mass Transportation working group have also been included in this task. MAPC is currently serving on the committee to rewrite the Massachusetts Highway Design Manual, as well as advisory committees for ongoing corridor and subregional studies.

MAPC Work Program Development—Development of a Boston Region land Use Vision for Use in the 2006 Regional Transportation Plan: To ensure that the MPO transportation activities are coordinated with the MAPC work program and with the development of a comprehensive growth plan, MAPC staff will organize and participate in regional and subregional forums to discuss the relationship between land use and transportation planning. As the certification documents, including the Transportation Improvement Program, are developed in the coming year, particular attention will be directed toward including land use planning issues in these documents as well as coordination with the development of the regional growth plan. MAPC is in the process of developing a Regional Growth Strategy, and a regional land use vision is expected to be part of the work program in 2004. The development of one or more regional visions will be a key element in the development of the 2006 Regional Transportation Plan, and MAPC's work this year will provide the foundation for this effort.

Support of the Public Participation Process for Metropolitan Planning Documents: MAPC and its subregions play a lead role in coordinating community input to the MPO public participation process. MAPC will continue to seek ways to increase public participation in a broader discussion of transportation priorities. MAPC activities include arranging dates and locations of public meetings, notifying participants, recording and summarizing comments, and distributing responses to comments. MAPC participates in the public involvement subcommittee of the MPO's Transportation Planning and Programming Committee, which is charged with developing and evaluating new public involvement programs for the region, and in the Environmental Justice Subcommittee, which seeks to involve traditionally under-served

MPO/MAPC LIAISON AND SUPPORT ACTIVITIES (CONT.)

STAFF: Metropolitan Area Planning Council

CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 1

STATUS: Ongoing PROJECT BUDGET: N/A*

communities. MAPC is also an active participant in the Regional Transportation Advisory Council meetings. In addition, working with the MBTA Advisory Council, MAPC coordinates and implements the election process for the local representatives on the MPO.

2004 Activities and Expected Work Products: Work will continue on this project as described above.

This project supports the 3C Planning Process Support Activities outlined on pages 6-2 through 6-4, as well as the development of the MPO certification documents presented on pages 6-17, 6-21, and 6-22.

FHWA/FTA Grant Application Task and Element: 44.21.03

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Oth				Other
		173,000	173,000	121,750		51,250		

^{*} Not applicable for ongoing work efforts.

REGIONAL MODEL ENHANCEMENT



CLIENT: Boston Metropolitan Planning Organization ID #: 11244

STATUS: Ongoing PROJECT BUDGET: N/A*

CTPS maintains a continuously evolving regional model that is used by the Boston MPO and other transportation agencies to perform travel forecasting and air quality conformity determinations. It is a highly sophisticated, data-intensive planning support tool that relies on computer representations of regional transportation systems. Objectives for the current three-year work scope are:

- To maintain a state-of-the-practice model set for forecasting regional travel that will be used to analyze the impacts of proposed changes in the regional transportation system.
- To incorporate advances in travel modeling into the CTPS model set. Specifically, CTPS will examine TRANSIMS, a major product of the Travel Model Improvement Program, for applicability to the Boston MPO.
- To incorporate transportation/land use interactions in the model set so that changes in land use that might result from improved transportation services to an area can be quantified.

FY 2004 Activities and Expected Work Products:

- Development of transportation/land use database for year 2000.
- Memorandum presenting a summary of land use allocation models currently in use.
- Memorandum presenting the proposed structure for an eastern Massachusetts land use allocation model.
- Development of a land use allocation model for eastern Massachusetts.
- Development of a well-calibrated 2000 base year regional model set.
- Incorporation of new or advanced techniques into the regional travel forecasting model set.

This effort supports projects in this UPWP that rely on the regional model for travel forecasting and analysis, particularly the air quality conformity determination for the Regional Transportation Plan, the Transportation Improvement Program, and the Program for Mass Transportation.

FHWA/FTA Grant Application Task and Element: 44.26.09

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	al 3C PL SPR §5303 MBTA O				Other
470,000			470,000	138,200	231,800	100,000		

^{*} Not applicable for ongoing work efforts.

SUBREGIONAL SUPPORT ACTIVITIES



CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 2

STATUS: Ongoing PROJECT BUDGET: N/A*

The MAPC region consists of 101 cities and towns that have been subdivided into eight geographic areas that are represented by subregional groups comprised of local participants. These groups range in size from 9 communities in the North Suburban Planning Council subregion to 23 communities in the Inner Core subregion. MAPC staff planners are assigned as coordinators for each of the subregional groups to assist members in developing a thorough understanding of subregional and regional transportation issues. These include the policies, goals, and objectives of the Regional Transportation Plan, the Transportation Improvement Program, the Congestion Management System, Transportation Demand Management program opportunities, the Program for Mass Transportation, and Metro Plan.

Subregions will be encouraged to recommend subregion projects and priorities for the TIP, the Transportation Plan, and the UPWP. The Congestion Management System, and the studies undertaken in each of the eight MAPC subregions, will be continuing topics of discussions and program monitoring by the subregions. MAPC subregional groups want to continue to participate in local corridor advisory committees wherever they are appropriate vehicles for working on area projects. Staff ensures that timely discussions of transportation-related issues occur by placing the topics on the monthly agendas, by leading and participating in the discussions, and by distributing appropriate documents and notices relating to non-subregional transportation meetings.

FY 2004 Activities and Expected Work Products:: Preparation of monthly meeting agendas, coordination with transportation agencies, traffic study reviews, reports to the Transportation Planning and Programming Committee, subregion and corridor advisory committee meeting support, and prioritization assistance.

This project supports local community involvement in the development of transportation planning documents.

FHWA/FTA Grant Application Task and Element: 44.21.04

Fu	ınding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
		15,200	15,200	13,200		2,000		

^{*} Not applicable for ongoing documents.

TRANSPORTATION IMPROVEMENT PROGRAM: CRITERIA



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 10103.2

STATUS: Ongoing PROJECT BUDGET: N/A*

In 2003, the MPO adopted criteria for prioritizing projects for the TIP and an initial process for implementing the criteria. CTPS will continue to support the MPO, through its Transportation Planning and Programming TIP Subcommittee, in reviewing and evaluating the TIP selection process, including the procedures and instruments used for the FY 2004–08 TIP, and may develop recommendations for revisions of the process for the FY 2005–09 TIP.

FY 2004 Activities and Expected Work Products: This project will continue as described above.

See other CTPS and MAPC work efforts related to the TIP presented in this chapter.

FHWA/FTA Grant Application Task and Element: 44.25.01

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
30,000			30,000	21,000		9,000		

^{*} Not applicable for ongoing work efforts.

TRANSPORTATION IMPROVEMENT PROGRAM: FISCAL YEARS 2005-10



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 10103.1

STATUS: Ongoing PROJECT BUDGET: N/A*

The Transportation Improvement Program (TIP) for the Boston Region is a document produced by the MPO that sets forth a six-year financially constrained program of proposed improvements to the metropolitan area's transportation system. Although federal regulations require the TIP to be biennially updated, the state and the metropolitan planning organizations have committed to annual updates.

Development: TIP development begins in the spring with the updating of the MPO's project database. The projects in the database are then sorted to provide a smaller subset for consideration for TIP programming. This subset includes projects programmed in the previous TIP, enhancement projects, Transportation Demand Management projects, and projects that are at 25% design or higher. The MPO staff reviews and ranks all of these projects based on criteria developed by the MPO. After preliminary ranking by staff, the MPO reviews the assessment and develops a draft TIP, which is released for a public comment period in July or August. After consideration of public comments the TIP is finalized in September.

Public Review: CTPS is responsible for public review of the TIP. Release of the circulation draft is announced in *TRANSREPORT*, press releases, and legal notices. The draft document is made available on the CTPS Web site and at all area public libraries. It is also mailed directly to the chief elected officials, DPW directors, and the MAPC and MBTA Advisory Board representatives in the 101 Boston MPO communities. Meetings are held throughout the region during the public review period.

Certification: CTPS performs all tasks necessary to properly certify the TIP, including:

- Producing all drafts, from circulation to endorsement.
- Coordinating public review of all drafts and preparing responses to comments.
- Scheduling and staffing meetings of the MPO and the Regional Transportation Advisory Council.

Adjustment/Amendment: CTPS drafts amendments and/or adjustments upon request of the sponsoring MPO agency and handles all procedural steps necessary to properly adopt and certify the adjustments and/or amendments (e.g., public notification requirements).

GIS Support: GIS support will include creation of TIP project coverages and mapping for use on an interactive Web site.

FY 2004 Activities and Expected Work Products: FY 2005–10 Transportation Improvement Program, attendance at relevant meetings and a desktop computer system for tracking projects.

This project is supported by the CTPS 3C Support Activities, the CTPS Air Quality Conformity Determination, the Disability Access Support, the TIP Criteria Implementation, and the TIP

TRANSPORTATION IMPROVEMENT PROGRAM: FY 2005-10 CONT.)



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 10103.1

STATUS: Ongoing PROJECT BUDGET: N/A*

Information Flow projects presented in this chapter. It is also supported by MAPC work efforts described in this chapter.

FHWA/FTA Grant Application Task and Element: 44.25.01

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	I 3C PL SPR §5303 MBTA Otl				Other
120,000			120,000	84,000 36,000				

^{*} Not applicable for ongoing work efforts.

TRANSPORTATION IMPROVEMENT PROGRAM: INFORMATION FLOW



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 10103.3

STATUS: Ongoing PROJECT BUDGET: N/A

The Information Flow Subcommittee of the Boston MPO has identified three facets of information flow which are outlined in the MOU governing the operations of the MPO: project status, financial and budget information, and process-related issues. As designated in this UPWP, MPO staff, or other parties, must provide "relevant, timely, and comprehensive" information including project planning, design, and construction status updates to the subcommittee and the MPO.

FY 2004 Activities and Expected Work Products: This project will continue as described above.

See other CTPS and MAPC work efforts related to the TIP presented in this chapter.

FHWA/FTA Grant Application Task and Element: 44.25.01

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	al 3C PL SPR §5303 MBTA Ot				Other
30,000			30,000	21,000		9,000		

^{*} Not applicable for ongoing work efforts.

TRANSPORTATION IMPROVEMENT PROGRAM: SUPPORT



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 3

STATUS: Ongoing PROJECT BUDGET: N/A*

MAPC currently chairs the TIP Criteria Working Group of the MPO's Transportation Planning and Programming Committee, where new criteria to assist in the evaluation of TIP projects have recently been developed. Criteria by project type have been developed and will be applied to the FY 2004 TIP, and it is expected that the criteria will also be evaluated and revised in FY 2004. In particular, additional work will be done to further develop land use and economic development criteria.

Development of the TIP is accomplished through work with other regional planning agencies, other MPO agencies, elected officials, MAPC subregions, MAPC community representatives, MAPC TIP contacts, and private providers of transportation. This is an important information/education function of the 3C planning process. MAPC works with the communities and MPO members to insure that the information needed for project selection using the TIP criteria will be available in a timely fashion. Upon the release of a Circulation Draft TIP, MAPC coordinates community review of the TIP.

MAPC will work with the MPO local members, the FHWA, FTA, MassHighway, and the MBTA to develop procedures for maintaining an up-to-date project information system. The system should include all highway and public transportation projects, both current and proposed, regardless of funding source. Once developed, MAPC will provide information for the "new PROJIS" on local problems, studies, and plans before they formally become projects, and will maintain contact with local communities to ensure that information is up-to-date.

FY 2004 Activities and Expected Work Products: Refining the TIP criteria by developing a set of economic impact criteria. After the TIP development process is completed for the FY 2004 TIP, using the newly developed TIP criteria, MAPC expects to work with the MPO to revise these criteria to provide better measurement of project benefits and costs.

See other CTPS and MAPC work efforts related to the TIP presented in this chapter.

FHWA/FTA Grant Application Task and Element: 44.25.01

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
		50,125	50,125	35,000		15,125		

^{*} Not applicable for ongoing work efforts.

TRANSPORTATION PLAN



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 10101

STATUS: Ongoing PROJECT BUDGET: N/A*

The Boston MPO Regional Transportation Plan sets forth a 20-year financially constrained plan for federally funded surface transportation improvements. The MPO is expected to approve a new Regional Transportation Plan that includes the results of a system-level environmental justice assessment in September 2003. Following its adoption, work will immediately begin on refinements to the document, if necessary, and development of a process for the 2006 Regional Transportation Plan

FY 2004 Activities and Expected Work Products:

- Revisions to the Regional Transportation Plan as required.
- Ongoing consultation with the MPO's Environmental Justice Committee.
- Additional analyses as requested by the Transportation Planning and Programming Committee.
- Model runs as required.
- Public outreach and presentations at public meetings.

This project is supported by 3C support activities presented on pages 3-2 through 6-4, the air quality work described on page 6-5, and the accessible formats project on page 6-8. It will also be closely coordinated with the Environmental Justice Committee work presented on page 6-9.

FHWA/FTA Grant Application Task and Element: 44.23.03

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	I 3C PL SPR §5303 MBTA O				Other
100,000			100,000	70,000		30,000		

^{*} Not applicable for ongoing work efforts.

UNIFIED PLANNING WORK PROGRAM



CLIENT: Boston Metropolitan Planning Organization ID #: 10104

STATUS: Ongoing PROJECT BUDGET: N/A*

The Boston MPO produces an annual Unified Planning Work Program. This document outlines all transportation planning activity, for all surface transportation modes, anticipated to be undertaken in the region during the UPWP period. It also includes detailed budget information on the expending of federal planning funds.

CTPS: Staff coordinates all phases of this work effort, from the document development and budget preparation, to public review and comment, to submittal to federal agencies. CTPS also coordinates the review and endorsement of any amendments to the UPWP.

MAPC: Staff prepares detailed project listings and budget information for activities it expects to conduct using federal highway and transit funds. MAPC also provides general project information on transportation-related activities funded from other sources. In addition, MAPC provides monthly reports to the MPO's Transportation Planning and Programming Committee on UPWP activities. MAPC staff, through its work on the Transportation Planning and Programming Committee, is also involved in the development of the annual UPWP work program. As work scopes for specific projects are developed throughout the year, MAPC, where appropriate, assists in developing these scopes.

CTPS FY 2004 Activities and Expected Work Products: The FY 2005 Unified Planning Work Program and amendments, public outreach in document development and review, monthly progress reports to the Boston MPO, attendance at relevant meetings, and preparation of quarterly implementation reports and other information materials as needed.

MAPC 2004 Activities and Expected Work Products: UPWP Project Listings and monthly reports on UPWP activities to the Transportation Planning and Programming Committee. Assistance on annual development process of the UPWP and support towards developing specific work scopes. Through Community liaison and subregional support activities, MAPC assists communities in identifying and developing studies to be included in the UPWP.

This project is supported by 3C support activities, the accessible formats project, environmental justice work efforts, and the MAPC subregional support project presented in this chapter.

FHWA/FTA Grant Application Task and Element: 44.21.01

Fu	nding Recip	ient		Funding Source				
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
50,000		15,000	65,000	48,750		16,250		

^{*} Not applicable for ongoing work efforts.

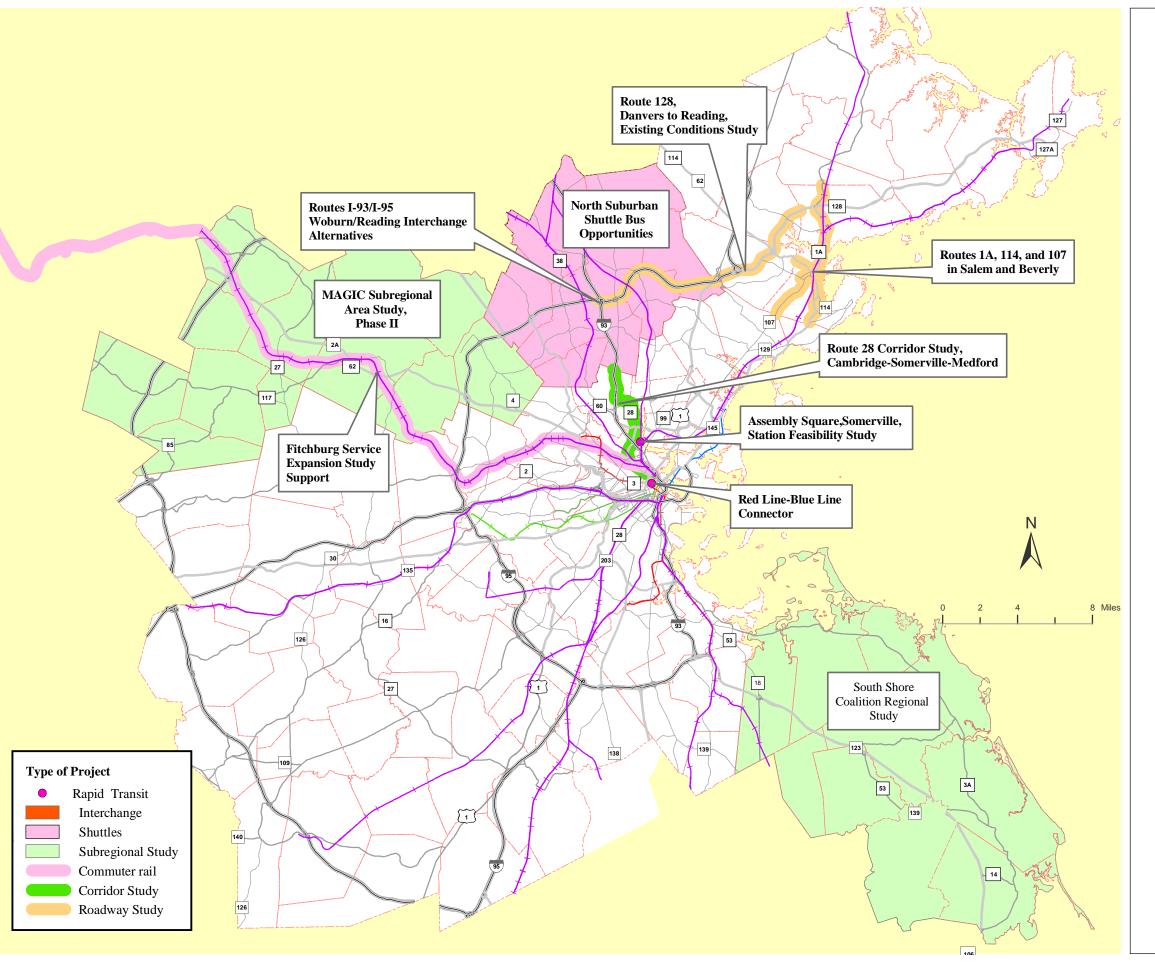
7 LOCATION/SITE-SPECIFIC PROJECTS

The projects in this chapter are categorized as Location/Site-Specific to assist local officials and those interested in specific geographic areas in finding a particular project. These projects are technical in nature and may include support to larger projects described in Appendix A: Other Boston Region Transportation Projects. In instances where this occurs, the project description refers the reader to Appendix A.

Project #	Project Name	Page #
23309	Assembly Square, Somerville, Station Feasibility Study	7-3
TBD*	Fitchburg Service Expansion Study Support	7-4
62102	MAGIC Subregional Area Study, Phase II	7-5
TBD*	North Suburban Shuttle Bus Opportunities, II	7-6
22326	Red Line-Blue Line Connector	7-7
TBD*	Route 128, Danvers to Reading, Existing Conditions Study	7-8
22116	Route 28 Corridor Study, Cambridge-Somerville-Medford	7-9
73211	Route I-93/I-95 Woburn/Reading Interchange Alternatives	7-10
TBD*	Routes 1A, 114, and 107 in Salem and Beverly	7-11
TBD*	South Shore Coalition Subregional Study	7-12

See the map on page 7-2 for the locations of the projects listed above.

^{*} To be determined at the time of work scope development.



FY 2004 UPWP Location/Site-Specitic Projects

	Page
Assembly Square, Somerville,	
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Fitchburg Service Expansion	
Study Support	7-4
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Study	7-8
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ASSEMBLY SQUARE, SOMERVILLE, STATION FEASIBILITY STUDY



STAFF: Central Transportation Planning Staff

CLIENT: City of Somerville ID #: 23309

STATUS: 75% PROJECT BUDGET: \$56,000

This study involves analyzing the impacts of a new Orange Line Station at Assembly Square in Somerville. Work would include an analysis of potential ridership, capital and operating costs, and operating feasibility for the MBTA.

FY 2004 Activities and Expected Work Products: Ridership modeling and analysis of several alternatives will be in progress. A technical memorandum describing the modeling method and the results of the ridership analysis will be prepared.

This work is related to a recommended regionally significant project identified in the MPO's Regional Transportation Plan and is included in the MBTA's Program for Mass Transportation. Also see Appendix A.

FHWA/FTA Grant Application Task and Element: 44.27.01

Funding Recipient					1	Funding Sou	ırce	
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
14,000			14,000					14,000

FITCHBURG SERVICE EXPANSION STUDY SUPPORT



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: TBD*

STATUS: 5% PROJECT BUDGET: \$30,000

The MBTA wishes to examine its options for expanding the current MBTA commuter rail service to Fitchburg. The Fitchburg Service Expansion Study will evaluate the performance of the recently expanded schedule and recommend adjustments where necessary, including, but not limited to, an examination of service restoration to Gardner and double tracking where applicable and necessary along the Fitchburg corridor. The study will also develop and evaluate investments and strategies that, if implemented, could create a wider range of travel options for MBTA riders living in the Fitchburg service corridor. In greater detail, the study consists of six principal work elements:

- Identification of goals and objectives.
- Evaluation of existing conditions.
- Identification of opportunities and constraints.
- Development of improvement packages.
- Analysis and evaluation of options.
- Final report.

FY 2004 Activities and Expected Work Products: CTPS ridership modeling and analysis of several alternatives will be underway. A technical memorandum describing the modeling method and the results of the ridership analysis will be prepared.

This work is identified in the MPO's Regional Transportation Plan Universe of Projects and is within the projects included in the MBTA's Program for Mass Transportation. Also see Appendix A.

FHWA/FTA Grant Application Task and Element: 44.24.01

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
28,500			28,500				28,500	

^{*} To be determined at the time of work scope development.

MAGIC SUBREGIONAL AREA STUDY, PHASE II



CLIENT: Boston Metropolitan Planning Organization ID #: 62102

STATUS: 70% PROJECT BUDGET: \$127,800

In FY 2001, CTPS conducted the MAGIC Phase I subarea study, which summarized congestion and mobility issues in that area of the MPO region and identified potential responses. This work, which included the evaluation of local shuttle bus services, was done cooperatively with town members of MAGIC.

The MPO's Transportation Planning and Programming Committee has approved a work scope for Phase II of the MAGIC Subregional Study. It focuses on exploring alternatives to single-occupancy vehicle trips. Major tasks include:

- The investigation of the potential for remote/satellite parking near existing MAGIC commuter rail stations.
- Access alternatives to connect satellite parking to commuter rail stations in the MAGIC subregion.
- A feasibility study update for the Concord–Sudbury Bikeway.
- Signal warrant counts at two Lexington locations.

FY 2004 Activities and Expected Work Products: Work on this study, which has been extended beyond the original schedule by six months, will continue as described above.

This work is related to a project identified in the universe of projects for the Regional Transportation Plan 2025 build scenario and was identified in the 2000 Congestion Management System Update.

FHWA/FTA Grant Application Task and Element: 44.24.02

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
38,300			38,300	38,300				

NORTH SUBURBAN SHUTTLE BUS OPPORTUNITIES, II

STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$50,000

In 2003, CTPS conducted the North Suburban Transit Opportunities Study, Phase I, which assessed the potential for new local transit services to both residential areas and employment centers in Burlington, Woburn, Wilmington, Reading, Stoneham, Wakefield, and a portion of Bedford. A number of potential new transit services were identified, along with modifications to existing services, that would improve mobility for commuters in the subregion.

The second phase of the North Suburban Transit Opportunities Study will include a more detailed analysis of these potential new services and modifications to existing routes. In each case, recommendations of service strategies (fixed route, point deviation, route deviation, demand responsive, etc.) will be made, along with specific routings, if applicable. Timetables will also be developed (if necessary) and cost estimates will be made along with approximate projections of ridership. Potential marketing strategies will also be addressed for those services deemed to have the most potential for success.

FY 2004 Activities and Expected Work Products: A work scope describing the tasks and work products associated with this project will be presented to the MPO's Transportation Planning and Programming Committee for approval to proceed.

This project carries out the Regional Transportation Plan's policy on mobility and will inform decisions about future funding in the Transportation Improvement Program.

FHWA/FTA Grant Application Task and Element: 44.24.02

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
50,000			50,000			50,000		

^{*} To be identified at the time of work scope development.

RED LINE-BLUE LINE CONNECTOR



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: 22326

STATUS: 70% PROJECT BUDGET: \$50,000

This project is currently a legal commitment under the State Implementation Plan and the MBTA is moving forward with a study of a possible connection between the Red Line and Blue Line. Considering the proposed Airport Intermodal Transit Connector, the Silver Line, and other systemwide improvements, the MPO has suggested, through its recently adopted Transportation Plan Update, that the Red–Blue connection be studied further to determine if it has the same benefits as when the project was first suggested. The project will be informed by the priorities set in the Program for Mass Transportation and will be completed in 2003.

FY 2003 Activities and Expected Work Products: A detailed work scope will be presented to the MPO's Transportation Planning and Programming Committee for approval to proceed.

This work is related to a recommended regionally significant project identified in the MPO's Regional Transportation Plan.

FHWA/FTA Grant Application Task and Element: 44.23.02

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
15,000			15,000				15,000	

ROUTE 128, DANVERS TO READING, EXISTING CONDITIONS STUDY



STAFF: Central Transportation Planning Staff

CLIENT: MassHighway ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$100,700

The purposes of this work program are to perform a reconnaissance/existing conditions study to establish a basis of traffic operational and safety issues along Route 128 between Danvers and Reading; and to identify a range of options, including transit, that may need to be pursued to process the total travel demand that exists along the corridor. Specifically, the study would cover the main line and ramps along Route 128 from, roughly, the Beverly/Danvers town line to Route 28 in Reading for operational analysis and a wider area on either side of Route 128 for travel demand analysis purposes. The study would rely mostly on existing data. A limited amount of new data may have to be collected.

The following items are potential tasks for inclusion in the reconnaissance study:

- Review past and ongoing studies along this stretch of Route 128/I-95.
- Develop traffic flow maps using readily available data.
- Identify locations where additional traffic counts would be needed, if an expanded study is warranted.
- Identify the total travel demand that needs to be moved through this corridor .
- Identify bottleneck points by gathering and displaying data on delays, queues, and travel times
- Perform field surveys to observe the effect of the I-93/I-95 interchange on the Route 128/I-95 segment in question.
- Interview key transportation agency and local officials.
- Based on the findings of the reconnaissance, recommend the type of study, including transit and highway improvement priorities, that may be appropriate to pursue in more detail.
- Write a technical memorandum to report findings, and circulate it for review and distribution.

FY 2004 Activities and Expected Work Products: A detailed work scope describing specific tasks will be presented to the MPO's Transportation Planning and Programming Committee for approval to proceed.

This work is related to a project identified in the Universe of Projects for the Regional Transportation Plan 2025 build scenario.

FHWA/FTA Grant Application Task and Element: 44.24.01

Fu	nding Recip	ient		Funding Source				
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
10,000			10,000		10,000			

^{*} To be determined at the time of work scope development.

ROUTE 28 CORRIDOR STUDY, CAMBRIDGE-SOMERVILLE-MEDFORD



STAFF: Central Transportation Planning Staff

CLIENT: MassHighway ID #: 22116

STATUS: 30% PROJECT BUDGET: \$199,800

The Route 28 Corridor (including O'Brien Highway, McGrath Highway, and the Fellsway) between Land Boulevard in Boston and Wellington Circle in Medford is undergoing considerable development activity as brownfield and grayfield sites come up for development. The goals of this study are to:

- Evaluate the collective impact of proposed developments on the Route 28 corridor.
- Develop strategies for addressing these impacts in a comprehensive fashion to decrease congestion and improve safety.
- Develop strategies for increasing the attractiveness of this corridor for pedestrian, bicycle, and transit services.
- Identify improvements needed to ensure that responsible development is sustainable in accordance with each affected community's land use plans.

FY 2004 Activities and Expected Work Products: Conduct public outreach, develop a transportation management plan, and produce documentation.

This work is related to a project included in the MPO's Regional Transportation Plan Universe of Projects.

FHWA/FTA Grant Application Task and Element: 44.23.01

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
139,000			139,000		139,000			

ROUTE I-93/I-95 WOBURN/READING INTERCHANGE ALTERNATIVES



STAFF: Central Transportation Planning Staff

CLIENT: MassHighway ID #: 73211

STATUS: 0% PROJECT BUDGET: \$50,000

In this work effort, CTPS will provide support to the MassHighway consultant hired to perform a conceptual design and feasibility study for operation improvements at the Route I-93/I-95 interchange in Woburn. Included in the study area are the Washington Street/Mishawum Road/I-95, Route 28/I-95, Montvale Avenue/I-93, and Industriplex/I-93 interchanges.

FY 2004 Activities and Expected Work Products: The CTPS component of the work may entail calibrating the CTPS regional travel model set for the specific needs of the study, coding alternatives developed by MassHighway and its consultant, running the model set to produce traffic forecasts, developing a simulation model for use in evaluating the roadway system, and performing the evaluations.

This work is related to a project recommended in the MPO's Regional Transportation Plan.

FHWA/FTA Grant Application Task and Element: 44.23.02

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
50,000			50,000		50,000			

ROUTES 1A, 114, AND 107 IN SALEM AND BEVERLY



STAFF: Central Transportation Planning Staff

CLIENT: MassHighway ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$150,000

The 2000 Congestion Management System Report identified that Routes 1A, 114, and 107 in Beverly and Salem are severely congested. In addition, the City of Salem requested in 2002 that the MPO fund a study in downtown Salem to examine these concerns, along with issues and opportunities related to the Salem commuter rail station, the redesigned Riley Plaza, South Harbor Garage, Bypass Road, and bike paths Trail One and Two through Salem. The study will document these and other issues through data collection, observation, analysis, and meetings with town officials; identify opportunities for improvement through alternative traffic management and circulation schemes, traffic diversions (bypass), and alternative modes; and document the results.

FY 2004 Activities and Expected Work Products: A detailed work scope describing specific tasks will be presented to the MPO's Transportation Planning and Programming Committee for approval to proceed.

FHWA/FTA Grant Application Task and Element:

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
50,000			50,000	50,000				

^{*} To be determined at the time of work scope development.

SOUTH SHORE COALITION SUBREGIONAL STUDY



CLIENT: Boston Metropolitan Planning Organization ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$200,000

One of the 2000 Congestion Management System Report recommendations was to perform a South Shore Coalition Subregional Study that would cover all eleven cities and towns. The purpose of the study would be to identify high-priority multimodal concerns (Phase I) for further study in Phase II. Similar studies have been performed successfully for the MetroWest, SWAP, and MAGIC subregions.

FY 2004 Activities and Expected Work Products: A detailed work scope describing specific tasks will be presented to the MPO's Transportation Planning and Programming Committee for approval to proceed.

FHWA/FTA Grant Application Task and Element:

Fu	nding Recip	ient		Funding Source				
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
81,200			81,200	81,200				

^{*} To be determined at the time of work scope development.

8 REGIONAL PLANNING STUDIES

The projects in this category are regional in nature. Unlike theprojects in the Location/Site-Specific category, the impact of these projects spans the entire Boston Metropolitan Planning Organization region. The projects are:

Project #	Project Name	Page #
23215	2002–2003 Route I-93 North and Southeast Expressway HOV Lane Monitoring	8-3
TBD*	2004–2005 Route I-93 North and Southeast Expressway HOV Lane Monitoring	8-4
13208	Bicycle/Pedestrian Studies	8-5
TBD*	Braintree Split (I-93 S & Route 3 South) Reconnaissance Study and Operational Assessment	8-6
11130	Congestion Management System (CMS) Monitoring Program	8-7
13117	Executive Order 418 Implementation	8-8
TBD*	Green Line Extension to Medford	8-9
11129	Intermodal Freight Planning Studies	8-10
MAPC 5	Land Use Development Project Reviews	8-11
22114	Massport Transportation Studies	8-12
82104	North Shore Improvements MIS/DEIS: Revere to Salem Corridor	8-13
MAPC 6	Regional Growth-Transportation Land Use Analysis	8-14
TBD*	Regionwide Suburban Transit Opportunities Study, II	8-16
23311	Silver Line Service, Phase III, Ridership Forecasts	8-17
22325	Urban Ring Environmental Impact Report, Phase II	8-18

See page 8-2 for a map of the region and specific project locations, where applicable.

^{*} To be determined at the time of work scope development.



FY 2004 UPWP Regional Planning Projects

The following projects represent large–scale planning studies, described on the page number shown:

page	number snown.	Page
1.	2004–2005 Route I–93 North and Southeast Expressway	8-4
2.	HOV Lane Monitoring Extension of Proposed Sudbury-Lowell Trail through Framingham	8–5
3.	Braintree Split (I–93 South and Route 3 South, Braintree & Quincy) Reconnaissance Study	8-6
4.	Congestion Management System (CMS) Monitoring Program*	8–7
5.	Executive Order 418 Implementation	8–8
6.	Green Line Extension to Medford	8-9
7.	Intermodal Freight Planning Studies*	8-10
8.	Land Use Development Project Reviews*	8-11
9.	Massport Ground Access, Regional Transportation and	8–12
10.	Air Quality Studies* North Shore Improvements MIS/SEIS – Revere to Salem Corridor	8–13
11.	Regional Growth – Transport– ation Land Use Analysis*	8–14
12.	Regionwide Suburban Transit Opportunities Study, II*	8–16
13.	Silver Line Service, Phase III, Ridership Forecasts	8–17
14.	Urban Ring Environmental Impact Report, Phase II	8–18

Numbers are keyed to projects shown on map. Starred (*) projects or activities are not displayed.

2002–2003 ROUTE I-93 NORTH AND SOUTHEAST EXPRESSWAY HOV



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 23215

STATUS: 80% PROJECT BUDGET: \$34,100

The Massachusetts Department of Environmental Protection requires roadway monitoring of the Southeast Expressway and Route I-93 North general-purpose and high-occupancy-vehicle (HOV) lanes to determine HOV performance and air quality benefits. The requirements are set forth in the state regulation 310 CMR 7.37, which calls for travel time data to be collected throughout the year.

FY 2004 Activities and Expected Work Products: To continue travel time runs on the Route I-93 North and Southeast Expressway HOV lane segments and their associated general purpose lane segments begun in this year and to calculate speeds, travel times, and HOV travel time savings for the year.

FHWA/FTA Grant Application Task and Element: 44.23.01

Fu	nding Recip	ient		Funding Source			ırce	
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
6,800			6,800		6,800			

2004–2005 ROUTE I-93 NORTH AND SOUTHEAST EXPRESSWAY HOV



STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: TBD*

STATUS: 75% PROJECT BUDGET: \$36000

In the late '90s, it was established that the two High Occupancy Vehicle (HOV) lanes should save motorists who use them one minute per mile. In order to measure their performance, CTPS has been asked to monitor travel time savings during their hours of operation. This work is performed seasonally and the results are summarized and documented.

FY 2004 Activities and Expected Work Products: Complete data collection, analysis, and documentation for winter, spring, and summer 2004.

FHWA/FTA Grant Application Task and Element: 44.23.01

Fu	Funding Recipient				Funding Source					
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Oth						
27,000			27,000		27,000					

BICYCLE/PEDESTRIAN STUDIES

STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: 13208

STATUS: Ongoing PROJECT BUDGET: N/A*

Bicycle and pedestrian planning studies are usually identified during the UPWP year as part of a collaborative process with MPO members, committees, and bicycle/pedestrian advisory groups.

FY 2004 Activities and Expected Work Products: Technical assistance, data collection, compilation of bicycle and pedestrian traffic volumes, review of materials, attendance at meetings, and preparation of detailed work scopes describing specific studies for presentation to the Transportation Planning and Programming Committee. Additional tasks expected to be undertaken are:

Walkable Communities Workshops: (\$15,000) A series of eight workshops were presented in May 2003 by national experts as part of a grant program. CTPS will continue this work effort by presenting additional workshops in cooperation with host communities.

Extension of the Proposed Sudbury–Lowell Trail: (\$20,000) In this study, which has been requested by Sudbury and Framingham, CTPS will perform a preliminary analysis of the trail's extension to Framingham.

Ongoing Bicycle and Pedestrian Work Efforts: (\$15,000) Tasks not related directly to separate reconnaissance studies are:

- Efforts to improve coordination with the MPO, state agencies, MAPC, and other groups with regard to bicycle planning for the region.
- Technical assistance to communities at all stages of bicycle and pedestrian planning.
- Support for statewide bicycle planning workshops.
- Development of the Pan-Massachusetts Challenge Bicycle Map used for the Jimmy Fund ride.
- Collection of bicycle and pedestrian traffic volumes, ongoing since 1975.
- Attendance at regional and local forums and committee meetings.
- Provision of information on previous CTPS studies and other bicycle/pedestrian issues, upon request.

FHWA/FTA Grant Application Task and Element: 44.24.02

Fu	nding Recip	ecipient]	Funding Sou	ırce	
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
50,000			50,000	34,500		14,500		

^{*} Not applicable to ongoing work efforts.

BRAINTREE SPLIT (I-93 S & ROUTE 3 SOUTH) RECONNAISSANCE STUD



STAFF: Central Transportation Planning Staff

CLIENT: MassHighway ID #: TBD*

STATUS: 5% PROJECT BUDGET: \$105,000

The purpose of this work program is to perform a reconnaissance study in order to obtain a better understanding of the traffic operational issues in the "Braintree Split" area. Upon completion of the reconnaissance, potential operational improvements will be assesses.

The study will cover essentially Route 3 and I-93 in Braintree and Quincy. Specifically, the limits are from just south of Route 3 Exit 17 (Union Street) in Braintree to just north of Exit 20;, and from just south of I-93/Route 1 Exit 6 (Route 37) in Braintree to just north of Exit 8 (Furnace Brook Parkway) in Quincy. Presently, the average weekday traffic per lane in the six-lane section of Route 3 north of Route 18 ranges between 22,000 and 26,000 vehicles, exceeding saturation flow conditions. In addition to weekday congestion, weekend/seasonal congestion also prevails in this area.

FY 2004 Activities and Expected Work Products: Staff will continue to work with the task force established in the summer of 2003, define existing conditions (reconnaissance, traffic counts, travel time runs); develop and calibrate model sets and produce traffic forecasts (calibrate CORSIM model, develop traffic forecasts, identify deficiencies) and develop shortand long-term options.

This work is related to a project included in the MPO's Regional Transportation Plan Universe of Projects.

FHWA/FTA Grant Application Task and Element: 44.24.01

Fu	nding Recip	ient		Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL					
114,000			114,000		114,000				

^{*} To be determined at the time of work scope development.

CONGESTION MANAGEMENT SYSTEM (CMS) MONITORING PROGRAM



STAFF: Central Transportation Planning Staff

CLIENT: MassHighway ID #: 11130

STATUS: Ongoing PROJECT BUDGET: N/A*

The development of a Congestion Management System Plan will continue in the Boston MPO region through the monitoring of highways, arterial roads, transit services, park-and-ride lots and bicycle/pedestrian facilities. In response to comments to be received during review of the forthcoming 2003 CMS Report, CTPS may modify certain performance measures and include additional services/facilities during the next monitoring cycle, which will begin in 2004. Results of the monitoring and recommendations will be summarized at the Boston MPO subregional level.

FY 2004 Activities and Expected Work Products: A new monitoring cycle will start and a work scope will be prepared for approval by the MPO's Transportation Planning and Programming Committee. Data will be displayed in tables or maps, as appropriate, for analysis. Recommendations to address problem locations will be made.

This project informs decisions related to the Regional Transportation Plan, the Transportation Improvement Program, and it identifies areas requiring additional study through the Unified Planning Work Program.

FHWA/FTA Grant Application Task and Element: 44.26.07

Fu	nding Recip	ient		Funding Source			irce	
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Otho				
250,000			250,000	250,000				

^{*}Not applicable for ongoing work efforts.

EXECUTIVE ORDER 418 IMPLEMENTATION



STAFF: Central Transportation Planning Staff

CLIENT: To Be Determined ID #: 13117

STATUS: 15% PROJECT BUDGET: \$75,200

These are projects that will be done under the auspices of the Executive Order 418 program this fiscal year and next. The program has been funded by a combination of state agencies and is intended to result in comprehensive plans in the communities who wish to avail themselves of program funds.

CTPS will become involved in the transportation element of these planning efforts in ten communities in the MPO region. The communities are: Essex, Hull, Milton, Rockport, Saugus, Somerville, Swampscott, Waltham, Watertown, and Winthrop. The objectives of the transportation elements of these planning efforts are varied. In many cases, the focus will be on enhancing pedestrian and bicycle access to transit stations. Others deal with vehicular traffic, bicycle routes, ferry service, and general, multimodal transportation planning issues. All but Somerville's transportation planning effort have been funded through MassHighway, using SPR funds. Somerville's planning effort is being funded through a CDBG.

FY 2004 Activities and Expected Work Products: The bulk of the work will occur in FY 2004. It is anticipated that Essex will be completed in FY 2003 and that Somerville will be three-quarters completed in FY 2004. Studies in the other eight communities will occur in FY 2004. Work will consist of a variety of data collection, analysis, mapping, and presentation efforts, all of which will be unique to each study.

FHWA/FTA Grant Application Task and Element: 44.24.02

Fu	nding Recip	pient Fu			Funding Sou	ırce		
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Otho				
58,000			58,000		58,000			

GREEN LINE EXTENSION TO MEDFORD



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$100,000

The MBTA is considering the extension of Green Line service from a relocated Lechmere Station to Medford Hillside. The implementation of this project is a requirement under the State Implementation Plan (SIP). The project will provide an additional mode choice for residents of Somerville and Medford. It is an attempt to increase the benefits for communities that bear the burden of transit infrastructure.

FY 2004 Activities and Expected Work Products: A detailed work scope will be presented to the MPO's Transportation Planning and Programming Committee for approval to proceed.

This work is related to a recommended regionally significant project identified in the MPO's Regional Transportation Plan and is included in the MBTA's Program for Mass Transportation.

FHWA/FTA Grant Application Task and Element: 44.23.02

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Oth				
100,000			100,000				100,000	

^{*} To be determined at the time of work scope development.

INTERMODAL FREIGHT PLANNING STUDIES



STAFF: Central Transportation Planning Staff

CLIENT: MassHighway ID #: 11129

STATUS: Ongoing PROJECT BUDGET: N/A*

This is considered an "umbrella" project under which detailed work scopes will be prepared during the upcoming UPWP year. The Executive Office of Transportation and Construction and MassHighway's Bureau of Planning and Development (BTP&D) maintain and promote a freight planning function for the entire state and especially the Boston MPO.

FY 2004 Activities and Expected Work Products: Last year, CTPS provided support to a working group that was formed to resolve several regional truck-related regulatory and policy issues in the MPO region and presented the result of the group's efforts in a document entitled "The Regional Truck Study." CTPS will continue to support this group in the refinement and implementation of study recommendations.

FHWA/FTA Grant Application Task and Element: 44.24.01

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Oth				
15,000			15,000		15,000			

^{*} Not applicable for ongoing work efforts.

LAND USE DEVELOPMENT PROJECT REVIEWS



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 5

STATUS: Ongoing PROJECT BUDGET: N/A*

Proposed land use development projects will be reviewed with respect to regional land use goals and development policies and their impacts on the transportation system. In particular, projects will be reviewed for consistency with Metro Plan, the regional plan for the Boston region, and MAPC's recently adopted Smart Growth principles. This effort will seek to determine whether each proposed development will have a positive or negative impact on balanced regional development and will consider environmental and land-use-related impacts. MAPC tracks all projects reviewed in its region under the Massachusetts Environmental Policy Act and provides a regional planning analysis to the Secretary of Environmental Affairs for all developments considered to have significant impact. Special attention will be given to local zoning ordinances and regulations that serve to reduce auto travel by encouraging carpooling, transit, and other modes. In its role as the regional clearinghouse for project reviews, MAPC will provide support to traditional public participation activities, including by holding periodic regional forums on land use and transportation issues. MAPC will continue to participate in a variety of specific project review activities. Last year, the Smart Growth Index was tested for environmental reviews of selected major projects in an effort to ensure that the new development would be consistent with the land use and transportation policies adopted in the Regional Transportation Plan and as part of a reevaluation of the regional land use plan. This effort to develop new evaluation tools will continue, and MAPC will also work with CTPS on regional transportation model enhancements to allow better consideration of land use alternatives. Successful methods for estimating land-use-related impacts will be incorporated into these reviews.

MAPC will begin to develop a GIS database of projects it reviews through the MEPA process. This database could serve as a tool to track and coordinate mitigation commitments, assist in the MEPA review of new developments, and be a useful tool for providing a picture of the impacts of future planned developments.

2004 Activities and Expected Work Products: MAPC will continue to participate in a variety of specific project review and related activities. It will continue to evaluate and develop new tools for project evaluation and will work to create a GIS coverage and related database of MAPC-reviewed projects and their mitigation commitments.

FHWA/FTA Grant Application Task and Element: 44.22.03

Fu	ınding Recip	ient		Funding Source			ırce	
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Ott				
		83,750	83,750	40,000		43,750		

^{*} Not applicable for ongoing work efforts.

MASSPORT TRANSPORTATION STUDIES



STAFF: Central Transportation Planning Staff

CLIENT: Massport ID #: 22114

STATUS: 0% PROJECT BUDGET: \$50,000

CTPS has historically provided technical assistance to Massport's Department of Aviation Planning and Development. The services typically support ground access planning, data collection and analysis, modeling, air quality analysis, and additional, to-be-determined transportation planning activities.

FY 2003 Activities and Expected Work Products: If CTPS services are required during this UPWP year, a work scope outlining specific tasks will be presented to the MPO's Transportation Planning and Programming Committee for approval to proceed.

FHWA/FTA Grant Application Task and Element: 44.23.01

Fu	nding Recip	ient		Funding Source			ırce	
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
50,000			50,000					50,000

NORTH SHORE IMPROVEMENTS MIS/DEIS: REVERE TO SALEM



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: 82104

STATUS: 90% PROJECT BUDGET: \$179,000

This Major Investment Study (MIS) will provide a comprehensive analysis of the transportation needs of the North Shore corridor, and it will attempt to build consensus around a set of improvement projects for this region through the use of an extensive public outreach program. This MIS will build upon past work, as it will examine many of the alternatives that have already emerged as potential improvements for the North Shore area.

Because of the significant environmental issues associated with several of the alternatives included in the MIS, the MBTA is expanding the MIS process to include a Draft Environmental Impact Statement (DEIS) that will consider a Blue Line extension to Salem through Lynn. The DEIS will also evaluate a connection between commuter rail and the Blue Line near Wonderland Station.

The MIS will continue to address issues of a regional nature that encompass the entire 32-community study area and all modes of transit. The DEIS process is an integral part of the MIS process because it will provide additional detail regarding the Blue Line extension options, which received high ratings and support in the initial MIS screening phases.

FY 2004 Activities and Expected Work Products: CTPS will continue to assist the MBTA in data collection, travel demand forecasting and other support activities associated with this study. CTPS will also review comments from the public participation process and address them in the analysis where possible.

Related UPWP Projects: This project supports MBTA work efforts described in Appendix A.

The Extension of the Blue Line to Lynn as presented in the MBTA's Program for Mass Transportation is a result of this work effort.

FHWA/FTA Grant Application Task and Element: 44.23.02

Fu	nding Recip	ient		Funding Source			ırce		
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other					
17,900			17,900				17,900		

REGIONAL GROWTH-TRANSPORTATION LAND USE ANALYSIS

STAFF: Metropolitan Area Planning Council

CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 6

STATUS: Ongoing PROJECT BUDGET: N/A*

Three distinct but related efforts are carried out under this project. In the first, a method for estimating the land use impacts of transportation projects will be developed. Under Task 2, MAPC will continue work on refining traffic analysis zones in the regional transportation model so that these land use impacts can be better estimated. The third task will use the results of the first two tasks to develop alternative land use scenarios and development patterns, for regional, subregional, and corridor studies, as needed, which may support different transportation investment decisions and different economic and environmental impacts.

Estimating Land Use Impacts: The recently developed TIP criteria have begun the process of incorporating the regional policies on land use, economic development, and environmental impacts adopted for the most recent Regional Transportation Plan into the project selection process. Evaluating the policies for each project proposed requires an estimation of its impacts on land development patterns, environmental justice, economic development, and the environment, along with transportation impacts. While we have made a start at estimating these impacts, much better information is needed. To incorporate the land use/transportation link directly into the Regional Transportation Plan development process, we need to understand how transportation investments will shape the region, and whether the investments in the Plan will help us to get to the land use vision we are developing as part of the Regional Growth strategy. This task will continue that process by evaluating the many alternative methods, software packages, and visioning techniques that have been developed and come into use in recent years. The method(s) selected will be sensitive to both the questions we need answered and the information available. This work will also involve significant coordination with CTPS staff on appropriate impacts and methods as they attempt to incorporate land use impacts into the regional transportation model.

Refining Traffic Analysis Zones: Building on its work with buildout and its knowledge of local land use issues, MAPC will work with CTPS and other MPO members in refining transportation analysis zones (TAZs) for use in the regional transportation model. TAZ disaggregation is part of the work program for model enhancements in the coming year, and developing TAZs that allow important land use and environmental justice issues to be evaluated will be a key component of this process.

Developing Alternative Land Use Scenarios: To fully evaluate a range of transportation investments requires assumptions about future land use patterns as well as the characteristics of the proposed transportation investment. Many different of future development scenarios are possible in response to different investment packages, and any alternative transportation analyses should incorporate these different futures.

Land use regulations, most notably zoning laws, directly influence development of an area by specifying the type of land use permitted in a zoning district, by specifying the amount of

REGIONAL GROWTH-TRANSPORTATION LAND USE ANALYSIS



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 6

STATUS: Ongoing PROJECT BUDGET: N/A*

development permitted on a lot, and by specifying certain development criteria. The type of use permitted in a zoning district has a direct relationship to traffic volumes along a corridor. High-traffic-generating land uses, such as retail uses, contribute more traffic volume to a corridor than low-traffic-generating uses, such as residential uses. The amount of development on a lot also has a direct relationship to traffic. A large amount of development allowed on a lot will typically result in greater traffic volumes than a smaller amount of development. Land use regulations that specify performance criteria have a direct impact on traffic flows and pedestrian and vehicular safety. When used in conjunction with traffic corridor studies, buildout projections can help to quantify the potential traffic impact caused by future development in a traffic corridor. With the planned buildout analyses providing an estimate of future development, MAPC proposes to extend these buildout scenarios to provide:

- An estimate of traffic generation resulting from the future development.
- An analysis of the impact those additional trips will have on transportation in affected traffic corridors. MAPC has extended the buildout scenarios for several communities in the I-495 region. During 2004, MAPC will work to apply the same process to communities in the corridor studies. Several tasks/products will be addressed in FY 2004, including the following:
- Apply a methodology for estimating the trip generation from future development in buildout communities.
- Use the buildout traffic scenario in targeted communities to estimate transportation impacts.
- Develop other land use scenarios, including one associated with concentrated development.
- Work with CTPS to apply a subset of the regional transportation model to analyze traffic generated across TAZs.
- Using these new TAZs, and the results of the 2000 Census, new forecasts of population, households, and employees will be developed for a number of land use scenarios for the 2006 update of the Regional Transportation Plan and the regional growth strategy.

FY 2004 Activities and Expected Work Products: MAPC work efforts will continue as described above.

FHWA/FTA Grant Application Task and Element: 44.22.02

Fu	ınding Recip	ient		Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	3C PL SPR §5303 MBTA Oth				
		160,000	160,000	125,000		35,000			

^{*} Not applicable for ongoing work efforts.

REGIONWIDE SUBURBAN TRANSIT OPPORTUNITIES STUDY, II

STAFF: Central Transportation Planning Staff

CLIENT: Boston Metropolitan Planning Organization ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$35,700

CTPS is currently conducting the first phase of the Suburban Transit Opportunities Study, which includes a review of suburban transit operations in peer metropolitan areas, an assessment of existing services in the Boston metropolitan area, and the development of new guidelines for operating successful transit service in Boston's suburbs. These guidelines are intended to be used by the MPO in evaluating applications for funding of new services that would improve mobility in suburban communities. The work program for this project also calls for CTPS to identify communities and employment centers where new suburban transit services may be successful, irrespective of any funding applications that may be received.

The second phase of this study will utilize the new guidelines for successful suburban service to continue work identifying candidate areas for new services and assisting communities with transit route planning. In the last UPWP, the description of the original Suburban Transit Opportunities Study foresaw such a technical assistance component in which CTPS staff would provide guidance to communities in the form of route and schedule recommendations and general forecasts of operating costs and ridership potential. While this was deemed a worthwhile activity, it could not be done justice in the work program for the original project, given the available budget. However, in this second phase of the Suburban Transit Opportunities Study, such technical assistance can and will be provided in order to ensure that MPO funds are distributed to sustainable new transit services in a cost-effective manner.

FY 2004 Activities and Expected Work Products: Detailed work scopes describing the tasks for this project will be presented to the MPO's Transportation Planning and Programming Committee for approval to proceed.

This project carries out the Regional Transportation Plan's policy on mobility and will inform decisions about future funding in the Transportation Improvement Program.

FHWA/FTA Grant Application Task and Element: 44.26.07

Funding Recipient				Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other					
35,700			35,700			35,700			

^{*} To be identified at the time of work scope development.

SILVER LINE SERVICE, PHASE III, RIDERSHIP FORECASTS



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: 23311

STATUS: 50% PROJECT BUDGET: \$52,500

The MBTA has requested CTPS's assistance in estimating ridership and user benefit for Silver Line, Phase III, routing alternatives.

FY 2004 Activities and Expected Work Products: CTPS will continue running the travel model and summarizing the ridership forecasts for the remaining alternatives. A technical memorandum describing the modeling methodology and the analysis results will be completed.

This project is related to an ongoing regionally significant project identified in the MPO's Regional Transportation Plan and is included in the MBTA's Program for Mass Transportation.

FHWA/FTA Grant Application Task and Element: 44.24.02

Funding Recipient				Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other					
26,300			26,300				26,300		

URBAN RING ENVIRONMENTAL IMPACT REPORT, PHASE II



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: 22325

STATUS: 95% PROJECT BUDGET: \$175,700

This project involves the MBTA's preparation of a DEIR/DEIS to analyze the proposed bus rapid transit (BRT) component of the Urban Ring and support the preparation of a New Starts Program grant application to the Federal Transit Administration.

FY 2004 Activities and Expected Work Products: CTPS will review comments from the public participation process and address them in the final analysis where possible. CTPS will also support the preparation of the New Starts application.

Related UPWP Projects: See Appendix A for MBTA-related work for this project.

FHWA/FTA Grant Application Task and Element: 44.23.01

This work is related to an illustrative project included in the Regional Transportation Plan and is included in the MBTA's Program for Mass Transportation.

FHWA/FTA Grant Application Task and Element: 44.23.01

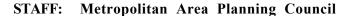
Funding Recipient				Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other	
70,000			70,000				70,000		

9 TECHNICAL SUPPORT

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* To be determined at the time of work scope development.

ALTERNATIVE-MODE PLANNING AND COORDINATION



CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 9

STATUS: Ongoing PROJECT BUDGET: N/A*

MAPC will provide alternative mode transportation planning support to the Boston MPO and to regional communities. Alternative mode in this case will include bicycle and pedestrian transportation, ridesharing (and other TDM services) and transit that is focused on areas currently under-served by the existing Regional Transit Authorities in the region. This work will include technical support and research on these modes in conjunction with CTPS' efforts.

Bicycle and Pedestrian Activities: continue to be pursued through their inclusion in the development of the Transportation Plan, the Transportation Improvement Program, and through assistance to communities preparing and implementing projects through the various funding programs. Work will also include attempting to resolve "regional" issues that prevent the successful implementation of bicycle and pedestrian facilities. MAPC will also support the coordination and implementation of transportation funding programs as follows:

Suburban Mobility Program: MAPC will work with the MPO to develop and implement the Boston MPO's planned "Regional Suburban Mobility Improvement Program". This program is intended for funding services that improve the mobility of residents in areas currently unserved or under-served by transit. Needed work will include the development of a program implementation process; the development of program guidance; and clarification of the make up of the program between "capital" and "operations" projects and the federal requirements tied to these funds. As the development of this program has been one of MAPC's ongoing interests, it is intended that, with the approval of the MPO, MAPC staff would be responsible for management of the program's implementation.

Congestion Mitigation and Air Quality (CMAQ): The federal CMAQ Program provides a funding source option to the Boston MPO for projects that reduce automobile congestion and improve air quality in the region. Work on this program includes coordinating with the Boston MPO and the region's communities to identify potential projects eligible for funding and providing technical support and assistance to communities in developing these projects. Additionally, MAPC is a member of the Statewide CMAQ Consultation Committee that is responsible for reviewing potential projects and approving their eligibility. MassHighway's annual statewide Transportation Demand Management (TDM) Program utilizes federal CMAQ funds. MAPC provides technical support and assistance to communities and organizations proposing Transportation Demand Management strategies to reduce traffic congestion and mobile source air pollution through better management of transportation infrastructure and vehicle trip travel. MAPC coordinates this program at the regional level by soliciting proposals and by staffing the review and recommendations for the projects selected by the regional TDM Selection Committee.

ALTERNATIVE-MODE PLANNING AND COORDINATION (CONT.)



CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 8

STATUS: Ongoing PROJECT BUDGET: N/A*

Transportation Enhancement Program: MAPC provides technical assistance and project review for communities and organizations proposing transportation enhancements to the existing transportation system. Working closely with the Massachusetts Highway Department, MAPC provides technical assistance to communities and nonprofit organizations that propose enhancement projects each year, screens proposals for completeness and compatibility with the regional transportation plan and provides staff support for the regional Transportation Enhancement Selection Committee. The Enhancement Program continues with its "rolling" deadline for proposals which includes a more intensive pre-application process. MAPC will continue with its site visits to project application sites, which include photo documentation and meeting on site with proponents to more fully understand the proposed projects. This information is then shared with the MAPC Regional Enhancement Committee to help it make better, more informed decisions on project proposals. MAPC will continue to work with the Boston MPO's TIP Criteria Working Group to refine criteria for Enhancement Projects at the MPO level during TIP programming. Also, MAPC will develop of a GIS based map of all previously approved Enhancement projects in the region.

Mobility Assistance Program (MAP): MAPC reviews proposals submitted to this EOTC administered statewide program. Current MAP guidelines require applicants to coordinate with the RPAs and to provide "regional service" that is coordinated with other entities to eliminate duplicative service.

Activities and Expected Work Products: MAPC will provide technical assistance and screen proposals to the CMAQ, Enhancement and MAP programs. Staff will provide support for the regional TDM and Transportation Enhancement Selection Committees. MAPC will also provide support and technical assistance in developing and implementing the MPO's Regional Suburban Mobility Improvement Program. MAPC will continue to work toward the implementation of the Statewide Bicycle and Pedestrian Plan, and work on bicycle/ pedestrian related issues.

FHWA/FTA Grant Application Task and Element: 44.22.01

FY 2004 Budget

Fu	Funding Recipient			Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other	
		79,125	79,125	51,000		28,125			

^{*} Not applicable for ongoing work efforts.

GENERAL DEVELOPMENT AND PLANNING ACTIVITIES



STAFF: Metropolitan Area Planning Council

CLIENT: Boston Metropolitan Planning Organization ID #: MAPC 9

STATUS: Ongoing PROJECT BUDGET: N/A*

The objective of this project is to develop, forecast, and analyze regional and community data that will assist in and support transportation and land use planning for the region.

MAPC will analyze data from the Census Transportation Planning Package (CTPP) to help develop an understanding of emerging commuting patterns such as suburban to suburban worker flow and assess the likely viability and effectiveness of travel demand management strategies.

Census 2000 - Evaluating Results in the MAPC Region: MAPC will analyze available information from the US 2000 Census, including the Census Transportation Planning Package (CTPP) and other sources, for population, household and employment with particular emphasis on identifying and analyzing their implications for changes in the nature and flow of transportation demand within and among the MAPC subregions. MAPC will develop a reporting database, designed for ease of query execution, for relevant 2000 Census and CTPP data. Journey-to-work data will be particularly useful for developing a better understanding of new transportation initiatives (suburban mobility) and in developing the next Regional Transportation Plan. This data and analysis will also be used to assist in developing the Regional Growth Strategy and in work on EO418 projects. MAPC analyses of census data will be shared with CTPS and MPO agencies.

The GIS lab will work with the MAPC's Data Center to link relevant data items to geographic features. The GIS lab will also provide requested technical assistance and GIS Support for transportation planning in the region.

FY 2004 Activities and Expected Work Products: Continued work to develop a database of community, subregion and corridor population and employment, and visual displays and analysis of this information. The GIS lab will continue to provide requested technical assistance and GIS support for transportation planning in the region.

FHWA/FTA Grant Application Task and Element: 44.22.01

FY 2004 Budget

Fu	Funding Recipient			Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Oth				Other	
		31,000	31,000	24,000		7,000			

^{*} Not applicable for ongoing work efforts.



CLIENT: MassHighway ID #: 60606

STATUS: Ongoing PROJECT BUDGET: N/A*

In years past, the CTPS Data Resources/Geographic Information Systems group has assisted the Bureau of Transportation Planning and development (BTP&D) on several GIS projects. This assistance included the functional reclassification of roadways and the establishment of a traffic monitoring system. Additional efforts included work on the inclusion of local roads in the Roadway Inventory, bridge and train GIS coverages, the Highway Performance Monitoring System (HPMS) files, and the linear referencing system.

FY 2004 Activities and Expected Work Products: Continued CTPS efforts will be in the areas of general administration and technical support.

FHWA/FTA Grant Application Task and Element: 44.23.04

FY 2004 Budget

Fu	Funding Recipient			Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other	
2,000			2,000		2,000				

^{*} Not applicable for ongoing work efforts.

IMPROVING PEDESTRIAN AND BICYCLE ACCESS TO TRANSIT



CLIENT: MassHighway/MBTA ID #: 13239

STATUS: 55% PROJECT BUDGET: \$74,900

The MBTA and MassHighway have asked CTPS to examine ways to improve pedestrian and bicycle access to transit stations. For as many as a half-dozen stations, CTPS will collect appropriate data and analyze opportunities to improve such access. Most of the field work, consisting of walk and bicycle audits, license plate surveys, counts of nonmotorized users of stations, and the like will occur in FY 03. Recommendations could pertain to signalization, pedestrian crosswalks, bike lanes, signage, bike lockers, etc.

FY 2004 Activities and Expected Work Products: It is anticipated that the project will be in the analysis phase in FY 2004. Staff will be examining the data collected, and will be formulating and presenting recommendations on how, specifically to improve non-motorized access to the selected stations.

This project forwards the policy of the Regional Transportation Plan which is to provide and improve connections among transportation modes. It is also included in the MBTA's Program for Mass Transportation.

FHWA/FTA Grant Application Task and Element:

FY 2004 Budget

Fu	Funding Recipient			Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other					
41,200			41,200		20,600		20,600		

LIVABLE COMMUNITIES INITIATIVE



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$30,100

The MBTA's Livable Transit Communities Planning Initiative will coordinate planning services and resources for transit stations and properties within a "Smart Growth" framework involving community partners. It will address issues of land use, environmental protection, economic health, accessibility, safety, and transit customer needs.

Partnerships and plans formed through this effort will aim to reflect local priorities in community development and to enhance the role of transit as a preferred transportation option.

FY 2004 Activities and Expected Work Products: A work scope describing the tasks and activities associated with this project will be presented to the Transportation Planning and Programming Committee for approval to proceed.

This project advances the Regional Transportation Plan and the Program for Mass Transportation's policies linking land use and transportation in the planning process.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Fu	Funding Recipient			Funding Source					
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other	
50,000			50,000			50,000			

^{*} To be identified at the time of work scope development.

MBTA 2004 NATIONAL TRANSIT DATABASE: DIRECTLY OPERATED BUS



CLIENT: MBTA ID #: TBD*

STATUS: 20% PROJECT BUDGET: \$74,800

The MBTA will be submitting its annual National Transit Database estimates of passenger boardings and passenger miles of various transit modes to the Federal Transit Administration with the aid of CTPS.

FY 2004 Activities and Expected Work Products: Ridechecks will be conducted for the bus and trackless trolley portions of the National Transit Database analysis. For heavy and light rail, origin-and-destination surveys will be conducted along with fare-mix observations. CTPS will begin to process and analyze this information and begin to prepare memoranda documenting passenger miles and boardings estimates in fiscal year 2004. However, these memoranda will not be completed until fiscal year 2005.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Funding Recipient				Funding Source					
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other	
69,800			69,800				69,800		

^{*} To be determined at the time of work scope development.

MBTA 2004 NATIONAL TRANSIT DATABASE: PURCHASED BUS



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: TBD*

STATUS: 20% PROJECT BUDGET: \$42,100

The objective of this project is to develop estimates of passenger boardings and passenger miles for bus routes operated as part of the Interdistrict and Suburban Transportation Programs and other contracted MBTA local bus service. The data that will form the basis of the estimates will be collected through onboard ridechecks.

FY 2004 Activities and Expected Work Products: Ridechecks will be conducted onboard a random sample of bus trips. CTPS will also begin to process and analyze this information and begin to prepare memoranda documenting passenger miles and boardings estimates in fiscal year 2004. However, these memoranda will not be completed until fiscal year 2005.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
39,600			39,600				39,600	

MBTA BUS SERVICE DATA COLLECTION, III



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: 11345

STATUS: 50%? PROJECT BUDGET: \$745,300

Following changes contained in the MBTA Service Plan, the MBTA requires ongoing data collection on its bus system to monitor the impacts of the service changes and to support future service planning efforts.

FY 2004 Activities and Expected Work Products: CTPS will be conducting ridechecks, pointchecks, and timechecks to monitor service on the MBTA bus system. This data will be processed and presented to the MBTA in summarized form, along with recommendations for service reallocations to correct schedule adherence problems or observed crowding problems.

Results from this work effort will also be used to update the regional model used to develop the Regional Transportation Plan and the Program for Mass Transportation.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Fu	nding Recip	ient		Funding Source			irce	
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
334,000			334,000				334,000	

MBTA POTENTIAL FARE INCREASE IMPACT ANALYSIS



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: 11348

STATUS: 70% PROJECT BUDGET: \$80,900

CTPS is supporting the MBTA's efforts to determine the impacts of a potential 2004 fare increase on ridership, revenues, the environment, and environmental justice target communities. To this end, CTPS is refining estimates of existing ridership by fare category and is estimating potential ridership losses by mode. These ridership impact estimates are being made using two different methods: a "manual" approach that utilizes a spreadsheet-based calculation tool, and an automated approach that utilized the Boston MPO's travel demand model. The ridership impacts will then be used to determine the potential effects of a fare increase on regional air quality. Meanwhile, mode-level fare increase impacts will be used to determine the price increase burdens on environmental justice target communities compared to nontarget communities.

CTPS is also assisting the MBTA with compiling a list of service reductions that may need to be implemented in the event that a fare increase is not approved.

FY 2004 Activities and Expected Work Products: CTPS will continue to support the MBTA"s efforts to determine the impacts of a potential 2004 fare increase. Public hearings on the fare increase are likely to be held in the fall, and CTPS will assist with preparing materials for public review. Additional fare increase scenarios may also be analyzed by CTPS in response to comments received at public hearings.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Ott				
25,000			25,000				25,000	

MBTA RAPID TRANSIT COUNTS



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$100,000

The last set of comprehensive rapid transit ridership observations were completed in 1997 for the Red, Orange, and Blue Lines. Green Line Central Subway ridership observations were also completed in 1997, but surface Green Line stations were last observed in 1995. This project would update those ridership observations to determine the current distribution of rapid transit riders by station entry. Current load profiles for each line would also be created. This information would assist MBTA Service Planning and Subway Operations in determining where and when existing service should be reallocated to meet demand. The information would also help determine the MBTA's compliance with its Service Delivery Policy standards for passenger loading.

FY 2004 Activities and Expected Work Products: CTPS will conduct manual weekday observations of passenger boardings at all rapid transit and streetcar stations. These observations will cover a composite weekday for all stations and will be summarized at fifteen-minute intervals. Ridership summaries will also include estimates of line volumes between each set of stations. A detailed work scope defining the specific tasks and work products will be submitted to the Transportation Planning and Programming Committee for approval to proceed.

Results from this work effort will also be used to update the regional model used to develop the Regional Transportation Plan and the Program for Mass Transportation.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
100,000			100,000			100,000		

^{*} To be determined at the time of work scope development.

MBTA SECTION 15 DATA 2003: DIRECTLY OPERATED BUS



ID #: 13389

STATUS: 90% PROJECT BUDGET: \$74,800

The MBTA will be submitting its annual National Transit Database estimates of passenger boardings and passenger miles of various transit modes to the Federal Transit Administration with the aid of CTPS.

FY 2004 Activities and Expected Work Products: The ridecheck and survey data collected in Fiscal Year 2003 will be processed and analyzed, and memoranda documenting passenger miles and boarding estimates will be prepared.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

CLIENT: MBTA

Fu	nding Recip	ient		Funding Source				
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
5,000			5,000				5,000	



STATUS: 95% PROJECT BUDGET: \$42,100

The objective of this project is to develop estimates of passenger boardings and passenger miles for bus routes operated as part of the Interdistrict and Suburban Transportation Programs and other contracted MBTA local bus service. The data that will form the basis of the estimates will be collected through on-board ridechecks.

ID #: 13390

FY 2004 Activities and Expected Work Products: The ridecheck and survey data collected in Fiscal Year 2003 will be processed and analyzed, and memoranda documenting passenger miles and boarding estimates will be prepared.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

CLIENT: MBTA

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Othe				
2,500			2,500				2,500	

MOBILITY ASSISTANCE PROGRAM AND §16(B)(2) REVIEW



STAFF: Central Transportation Planning Staff

CLIENT: Executive Office of Transportation and Construction ID #: 11111

STATUS: Ongoing PROJECT BUDGET: N/A*

Pre-applications and final applications from organizations located in the MAPC district for funding under the federal 16(b)(2) program and the state's Mobility Assistance Program (MAP) will be reviewed for their consistency with regional goals. These programs award eligible organizations with capital grants for providing people who are elderly or disabled with transportation services. As well as commenting in detail on each application, staff will attend all relevant meetings and participate in the selection of funding recipients.

FY 2003 Activities and Expected Work Products: Grant application evaluations and guidance to program participants.

FHWA/FTA Grant Application Task and Element: 44.21.05

FY 2004 Budget

Fu	nding Recip	ient		Funding Source			irce	
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
10,000			10,000			10,000		

^{*} Not applicable for ongoing projects.

NIGHT OWL SERVICE DATA COLLECTION



CLIENT: MBTA ID #: 11338

STATUS: 85% PROJECT BUDGET: \$56,800

In response to requests from customers and elected officials who desired late night transit access to entertainment venues and places of employment in Boston's urban core, the MBTA began Night Owl bus service as a pilot project on select routes in September 2001. CTPS has conducted on-board ridership checks and stationary peak-load-point ridership observations and has presented some of the data to the MBTA in the form of trip summaries, load profiles, and other summary tables.

FY 2004 Activities and Expected Work Products: CTPS will summarize the remaining unprocessed data for the MBTA in the form of trip summaries, load profiles, and other summary tables.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Fu	ınding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Ott				
14,100			14,100				14,100	

PLANNING ASSISTANCE TO MASSHIGHWAY



STAFF: Central Transportation Planning Staff

CLIENT: MassHighway ID #: 11124

STATUS: Ongoing PROJECT BUDGET: N/A*

Work on this project is performed as requested by MassHighway's Bureau of Transportation Planning and Development (BTP&D) Depending on their needs, CTPS will provide general technical assistance with BTP&D planning activities. These include:

- Short-term and ongoing analysis of projects and proposals, including travel demand modeling, impacts analysis, air quality analysis, and other types of analysis.
- Preparation of supporting data, graphics, maps, and other materials for BTP&D studies and presentations.
- Technical assistance to MassHighway Planning activities such as development of travel demand models and development of the Statewide Transportation Plan.

FY 2004 Activities and Expected Work Products: Activities and work products will depend on tasks requested by BTP&D.

FHWA/FTA Grant Application Task and Element: 44.24.01

FY 2004 Budget

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
264,800			264,800		264,800			

^{*} Not applicable for ongoing work efforts.

PROGRAM FOR MASS TRANSPORTATION-GENERATED STUDIES



CLIENT: MBTA ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$78,100

Through the Program for Mass Transportation (PMT) process, a number of issues and projects were identified that may warrant further analysis and review. Because the PMT has been completed, the objective of this project is to provide a mechanism to consider such topics that were raised within the PMT.

FY 2004 Activities and Expected Work Products: CTPS will support the MBTA in conducting more in-depth analysis of projects recommended in the 2003 PMT.

FHWA/FTA Grant Application Task and Element: 44.23.02

FY 2004 Budget

Fu	nding Recip	ient		Funding Source			irce	
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Othe				
78,100			78,100			50,000	28,100	

^{*} To be determined at the time of work scope development.

SILVER LINE, PHASE II, BEFORE-AND-AFTER STUDY



STAFF: Central Transportation Planning Staff

CLIENT: MBTA ID #: TBD*

STATUS: 0% PROJECT BUDGET: \$35,000

CTPS will provide support to the MBTA in the Authority's preparation of a Before and After analysis of the Silver Line Phase II Project. At this time, CTPS' efforts will likely focus on helping the MBTA to identify the baseline conditions prior to the opening of Phase II service. This analysis will be required by the Federal Transit Administration (FTA) for New Starts projects, and is intended to provide greater information relative to the costs and impacts of significant transit investments. These studies are also important as a way to improve the technical aspects of planning and developing major transit investments.

FY 2004 Activities and Expected Work Products: A detailed work scope defining the specific tasks and work products will be submitted to the Transportation Planning and Programming Committee for approval to proceed.

This work is related to an ongoing regionally significant project identified in the Regional Transportation Plan.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL SPR §5303 MBTA Other				
35,000			35,000			35,000		

^{*} To be determined at the time of work scope development.

STUDY REFINEMENTS



CLIENT: Boston Metropolitan Planning Organization ID #: 90080

STATUS: Ongoing PROJECT BUDGET: N/A*

In the vast majority of requests for additional transportation planning and traffic engineering analysis, the amount of effort is significant and a specific scope of work is developed for those projects. Occasionally requests, including various quick response analyses for MBTA service planning and MassHighway traffic planning, will come to CTPS that require only a modest effort for CTPS to complete, largely due to the sizable effort that has been devoted to preparing transportation models. Accounting for those requests, which will be typically less than two person weeks per request, is done under a generic project description. An example is a request that Metro Plan 2000 be evaluated as a conceptual plan with specific impacts on transportation projects in the region.

FY 2004 Activities and Expected Work Products: Activities and products will depend on the tasks requested by the MPO agencies.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Fu	nding Recip	ient		Funding Source			ırce	
CTPS	ЕОТС	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
18,000			18,000	5,600	10,000	2,400		

^{*} Not applicable for ongoing work efforts.

TESTING OF T2 TRAFFIC ASSIGNMENT SOFTWARE



CLIENT: U.S. DOT, Volpe Center

ID #: 60309

STATUS: 75% PROJECT BUDGET: \$38,500

This project involves performing a base-year traffic assignment on the Boston MPO highway network using the T2 software and comparing the assignment results with the traditional Urban Transportation Planning System results. This comparison will indicate whether the Bicriterion user-equilibrium technique that T2 is based on is superior to the traditional single criterion method that Urban Transportation Planning System uses.

FY 2004 Activities and Expected Work Products: Continue the sensitivity analysis of traffic assignments on the Boston highway network and complete the technical memorandum.

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Fu	nding Recip	ient		Funding Source			irce	
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
14,000			14,000					14,000

TOP 1,000 TRAFFIC ACCIDENT LOCATIONS



CLIENT: MassHighway ID #: TBD*

STATUS: 10% PROJECT BUDGET: \$150,000

For the past several years, MassHighway has asked CTPS assistance in locating accidents from Registry of Motor Vehicle (RMV) data. CTPS has developed Arc/INFO tools for standard street naming, calculating Top Thousand High Accident Intersection lists and linking crashes to the Road Inventory File. A rolling three-year listing is produced on a yearly basis with a 1998-2000 list to be produced during this UPWP year.

FY 2004 Activities and Expected Work Products:

- Two top crash lists (1998-2000 and 1999-2001)
- Road Inventory Files for the Registry of Motor Vehicles

FHWA/FTA Grant Application Task and Element: 44.24.02

FY 2004 Budget

Funding Recipient				Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
112,500			112,500		112,500			

^{*} To be determined at the time of work scope development.

TRANSPORTATION FACT BOOK UPDATE



CLIENT: Executive Office of Transportation and Construction ID #: 13118

STATUS: Ongoing PROJECT BUDGET: N/A*

CTPS updates and produces for EOTC a "Massachusetts Transportation Facts" booklet. This booklet gives an overview of the Massachusetts intermodal transportation network and its use. It includes a series of maps to show the major components of the system and presents information on the physical characteristics of the existing infrastructure as well as financial data associated with maintaining and operating it. The booklet also briefly describes programs available to travelers that reduce congestion and air pollution.

FY 2004 Activities and Expected Work Products: CTPS will prepare a 2004 Transportation Fact Book upon request by the Executive Office of Transportation and Construction.

FHWA/FTA Grant Application Task and Element: 44.22.04

FY 2004 Budget

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
15,000			15,000		15,000			

^{*} Not applicable for ongoing projects.

TRAVEL DATA FORECASTS



CLIENT: Boston Metropolitan Planning Organization ID #: 90080

STATUS: Ongoing PROJECT BUDGET: N/A*

In the majority of requests for additional transportation planning and traffic engineering analysis, the amount of effort is significant and a specific scope of work is developed for those projects. Occasionally requests, including various quick response analyses for MBTA service planning and MassHighway traffic planning, will come to CTPS that require only a modest effort for CTPS to complete, largely due to the sizable effort that has been devoted to preparing transportation models. Accounting for these requests, which will be typically less than two person weeks per request, is done under this generic project description.

FY 2004 Activities and Expected Work Products: Activities and work products will depend on tasks requested by the MPO agencies.

FHWA/FTA Grant Application Task and Element: 44.24.01

FY 2004 Budget

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
35,000			35,000	10,000		25,000		

^{*} Not applicable for ongoing work efforts.

TRAVEL OPERATIONS ANALYSIS



CLIENT: Boston Metropolitan Planning Organization ID #: 90040

STATUS: Ongoing PROJECT BUDGET: N/A*

Through the performance of various planning studies for the MBTA, CTPS has accumulated a large amount of ridership, revenue and service data. This project involves performing various short-term analyses using this available data, upon request.

FY 2004 Activities and Expected Work Products: Activities and work products will depend on tasks requested by the MPO agencies.

FHWA/FTA Grant Application Task and Element: 44.24.01

FY 2004 Budget

Fu	nding Recip	ient		Funding Source				
CTPS	EOTC	MAPC	FY 04 Total	3C PL	SPR	§5303	MBTA	Other
17,000			17,000			17,000		

^{*} Not applicable for ongoing work efforts.

10 MPO OPERATING SUMMARIES

Chapter 10 contains overall budget information by recipient agency and by funding source for projects listed in the previous chapter. The information is presented according to the following UPWP categories:

Administration and Resource Management Projects	\$800,500
Certification Requirements	2,134,900
Location/Specific-Projects	466,900
Regional Planning Projects	1,002,000
Technical Support Projects	1,504,700
EOTC Match*	<u>182,200</u>
Total	\$6,091,200

Funding for the MPO projects in the FY 2004 UPWP comes from the following sources that are described in Chapter 2:

FHWA/MHD 3C Planning (PL)	\$2,523,500
FHWA/MHD Statewide Highway Planning and Research (SPR)	1,157,000
FTA/ Local Match to Section 5303**	1,493,400
MBTA	\$835,000
Massachusetts Port Authority	50,000
Special Contracts	\$32,300
Total	\$6,091,200

In the following pages, the budget information presented in the preceding chapter is summarized in six tables. These tables are followed by a one-page summary showing the entire budget by recipient agency and funding source.

The purpose of these summaries is to assist federal and state contract administrators in reviewing the overall budget in detail. A key is provided defining each funding source identified in the table headers.

The final UPWP will include detailed budget information by category, and by Federal Transit Administration Task and Element. It will also include the status of 3C PL funds for the Boston Region MPO.

^{*} MBTA and EOTC Section 5303 matching funds have been applied to the UPWP categories as a whole rather than to individual projects.

^{**} Includes MBTA Section 5303 funds of \$215,100.

APPENDIX A

The following are brief descriptions of planning studies that will be conducted in the Boston MPO region by individual agencies, such as Massport or the MBTA. MPO funding will not be used for these studies, although in certain instances an agency or one of its consultants may contract with MPO staff to provide support work for the preparation of an environmental impact report (EIR) or major investment study (MIS). For these projects, CTPS support work is described in chapters 5 through 9 with a cross-reference to the project listing in this appendix. Likewise, projects listed in this appendix indicate whether there is a CTPS component. An example of this is the Urban Ring EIR, Phase II. CTPS support work is described in Chapter 8 and the MBTA project itself is presented in this appendix.

The projects in this appendix are not subject to the Boston MPO's public participation process. Rather, they follow their own public processes with established citizen advisory committees, as required by the Massachusetts Environmental Policy Act (MEPA). They are included here to provide a complete picture of all the transportation planning projects occurring in the region.

Assembly Square Orange Line Station

This study involves analyzing the feasibility of a new Orange Line Station at Assembly Square. The City of Somerville is working in close coordination with the MBTA to determine the need for this station and the possibility of private financing to construct a station.

Agency: City of Somerville

Agency: EOTC/MassHighway

Agency: MBTA

Agency: MBTA

Commuter Rail Capacity Needs Assessment

This project will continue the analysis started in the MBTA Commuter Rail and Rapid Transit Ridership Project that generated ridership information and parking demand forecasts. This study will also evaluate line capacity issues, which must be met to address identified needs.

Executive Order 418 Implementation

Implementation Executive Order 418 signed in January 2000 is a state funded initiative intended to help cities and towns expand their housing opportunities, while balancing economic development, transportation infrastructure improvements and open space preservation. Its implementation will be a combined effort of the Department of Housing and Community Development (DHCD), the Executive Office of Environmental Affairs (EOEA), the Executive Office of Transportation and Construction (EOTC), and the Department of Economic Development. Technical assistance and grants of up to \$30,000 will be available to assist communities in developing plans. Of that, \$10,000 per community may be used for transportation planning.

CTPS and MAPC are on the list of qualified contractors to provide transportation planning services to communities under Executive Order 418 and their participation is listed in Chapter 8. Other qualified contractors would include consultants hired by communities.

Fitchburg Commuter Rail Extension

The MBTA wishes to examine its options for expanding current MBTA commuter rail service to Fitchburg. The proposed Fitchburg Service Expansion Study will evaluate the performance of the recently expanded schedule and recommend adjustments where necessary, including, but not limited to, an examination of service restoration to Gardner and doubletracking where applicable and necessary along the Fitchburg corridor. The study will also develop and evaluate investments and strategies that, if implemented, could create a wider range of travel options for MBTA riders living in the Fitchburg service corridor. In greater detail, the study consists of six principal work elements:

Identification of goals and objectives

- Evaluation of existing conditions
- Identification of opportunities and constraints
- Development of improvement packages
- Analysis and evaluation of options
- Final report

See Chapter 7 for related work being conducted by the Central Transportation Planning Staff.

Green Line Extension to Medford

The Green Line Extension proposal is a CA/T and SIP commitment with a Dec. 2011 for implementation per a 2000 Administrative Consent Agreement between DEP and EOTC.

The MBTA will begin planning for this project with an Alternatives Analysis study that will evaluate costs, benefits and impacts of routing and mode variants.

See Chapter 8 for related work being conducted by the Central Transportation Planning Staff.

Intelligent Transportation Systems Development and **Implementation**

MassHighway is engaged in planning, developing and implementing Intelligent Transportation Systems (ITS) to more effectively operate the highway system in Massachusetts. Planning activities for ITS are described in the State Planning and Research Program – Part I, which is available from MassHighway's Bureau of Transportation Planning and Development. Current planning activities include developing the Regional ITS Architecture for Metropolitan Boston and for other regions within the state.

MassHighway has established an ITS Unit within Highway Operations to design, develop, implement and maintain ITS systems across the State. The ITS Unit works with consultants and contractors on these rapidly evolving technologies. Current activities in the Boston region include construction of the regional Traffic Operations Center in South Boston; operation of the HOV Lanes on I-93 into Boston from the north and south; and development of an Advanced Transportation Management System.

I-93/I-95 Interchange, Woburn/Reading

The Bureau of Transportation Planning and Development (Planning) is working with an advisory task force to conduct a study that will evaluate and address transportation issues of the I-93/I-95 Interchange corridor through the towns of Reading and Stoneham and the city of Woburn. A full

Agency: MBTA

Agency: MassHighway

Agency: MassHighway

range of alternatives, including interchange improvements and non-highway options, will be developed and analyzed as the study progresses. Planning is currently revising the scope of work, and will incorporate the finalized scope into an RFR (Requests for Responses) to secure a consultant. CTPS will provide travel demand forecasting services to supplement the work of the selected consultant.

See Chapter 7 for related work being conducted by the Central Transportation Planning Staff.

North Shore Major Investment Study (MIS) and Draft Environmental Impact Statement (DEIS) on Transit Improvements between Revere and Salem

The MBTA is conducting a study of the transportation needs in the North Shore Corridor. This study began with an examination of individual feasibility studies previously conducted in the area that analyzed Blue Line extensions, commuter rail improvements, and the construction of a commuter rail connection at Wonderland Station. This study will provide a comprehensive analysis of all possible alternatives. Because of the significant environmental issues associated with several of the alternatives included in the MIS, the MBTA expanded the MIS process to include a Draft Environmental Impact Statement (DEIS/FEIS) that is considering a Blue Line extension to Salem through Lynn. The DEIS is also evaluating a connection between commuter rail and the Blue Line near Wonderland Station.

The MIS is continuing to address issues of a regional nature that encompass the entire 32-community study area and all modes of transit. The budget to date for this project is approximately \$4.4 million which allows for the completion of the MIS, the DEIS, and some additional elements of the environmental review process.

See Chapter 8 for related work being conducted by the Central Transportation Planning Staff.

Agency: MBTA

Region One University Transportation Center Research Program

Colleges & Universities

The following is a list of research programs, by modes, that are currently being conducted at the Region One University Transportation Center. For further information on specific projects, contact Paula Magliozzi at (617) 253-0753.

Harvard	Universit	v
mai vai u	Universit	· y

mar varu Omiversity	
• Controlling Motor Vehicle Pollution in Southern China (Highway)	\$63,000
 Smart Growth and Transportation: Translating the Ideas into Policies in Massachusetts and New Jersey (Multi-Modal) 	\$63,000
 The New National Ambient Air Quality Standards in Transportation Planning (Multi-Modal) 	\$15,000
Massachusetts Institute of Technology	
• Safety, Self-Regulation and the "New" Older Driver (Multi-Modal)	\$64,500
• The Effectiveness of Job-Housing Balance as a Congestion Relief Strategy (Multi-Modal)	\$64,500
• MIT Centralized Technology Transfer Initiatives (Multi-Modal)	\$20,000
University of Connecticut	
Parking Demand Management for Sustainable Development: Learning from Innovative New England Communities (Highway)	\$63,000
Modeling Modal Transient Events for Vehicle Emission Models (Highway)	\$53,000
University of Maine	
Transportation CAD-Laboratory (Multi-Modal)	\$25,500
University of Massachusetts • Interdisciplinary Traffic Safety Curriculum (Highway) \$30,000	
University of Vermont	
• Extended Kalman Filter for the On-line Calibration of Traffic Simulation Models (Highway)	\$25,500

Route 129/I-93 Interchange, Wilmington

This project involves the construction of slip ramps in the northwest quadrants of the interchange to help facilitate the movement of exiting traffic from I-93. Additionally, this project entails the reconstruction and widening of Route 129 from Woburn Street in Wilmington to Causeway Street in Reading, and the reconstruction and the relocation of two intersections with Route 129/West and Woburn Streets.

Agency: MassHighway

Transportation and Community and Systems Preservation (TCSP)

This project creates unique, regionally coordinated local partnerships that will assess transportation needs, and design and implement solutions to connect low-income communities to employment centers. The focus will be on suburb-to-suburb transportation, an emerging issue with universal metropolitan significance. The project draws on the front line knowledge of local, community-based organizations who partnered with transportation planners and providers, and a Workforce Investment Board. This partnership will be guided locally, but administered centrally by MAPC. An initial evaluation of performance outcomes from a recent U.S. Department of Labor Welfare-to-Work transportation grant awarded to MAPC demonstrates that such partnerships are effective in developing timely, responsive community-based transportation that provides access to jobs and other services for economically disadvantaged populations. Metrowest Community Transportation Project (CTP) is a process to build and demonstrate a model of effective community-based, participatory transportation planning. The project will develop a critical mass of informed local partners who will begin working towards mass transit solutions. This planning activity will effectively model, for an entire community, an authentic planning process to address suburban transit needs. CTP will employ an evaluation methodology that determines the success of transit by assessing the impact of the transit on the quality of life of transit-dependent citizens living in low-income communities. MAPC will provide regional linkage for this family of local projects, incorporating lessons learned and best practice into regional transportation planning sponsored and sustained by the Boston Metropolitan Planning Organization.

Urban Ring Environmental Impact Report, Phase 2 Agency: MBTA

In this project, the MBTA will complete the environmental review process for Phase 2 of the Urban Ring Circumferential Transit Project, prepare a combined DEIR/DEIS document, submit a New Starts application to enter into preliminary engineering, and complete the FEIR/FEIS for the Bus Rapid Transit (BRT) service and new and improved commuter rail stations. Elements of the BRT service will consist of: grade separated rights-of-way; modification of surface streets and ITS at intersections for operations in mixed traffic; and use of articulated, low floor, low emission buses. The budget for this study, including the completed MIS, is \$6.7 million including an anticipated FY 2003 federal earmark and state match.

See Chapter 8 for related work being conducted by the Central Transportation Planning Staff.

Agency: MAPC

APPENDIX B SUMMARY OF COMMENTS AND RESPONSES

Following the close of the reviw period a summary of all written comments received and the MPO's responses to them will be prepared and included in the final UPWP.

APPENDIX C GLOSSARY

AA - Alternatives Analysis

AACT (Access Advisory Committee to the MBTA) - Consumer group that meets with MBTA staff to discuss the transportation concerns of people with disabilities and to ensure ADA compliance.

ADA (Americans with Disabilities Act) - Federal legislation prohibiting discrimination on the basis of disability, requiring accessible transportation services. See **Paratransit**.

Arterial - A class of street or highway serving major through traffic, usually on a continuous route.

AWDT (Average Weekday Daily Traffic) - The average number of vehicles that pass a specified point during a 24-hour period.

BTP&D - (Bureau of Transportation Planning and Development) Part of MassHighway.

CAAA (Clean Air Act Amendments of 1990) - Federal law that sets allowable levels, which are known as National Ambient Air Quality Standards (see NAAQS), for various pollutants. Where these standards are not attained, officials must take specified actions within a set time frame or face potential sanctions, such as loss of federal highway funds.

CARAVAN for Commuters, Inc. - A private, non-profit corporation that promotes ridesharing, provides information on transportation alternatives to commuters, and assists in establishing transportation management associations.

CA/THT - Central Artery/Third Harbor Tunnel

CDC (Concentrated Development Center) - A land-use designation used to encourage compact, higher density development in areas that have adequate public facilities including transportation, sewer, water, parks, and recreation.

CMAQ (**Congestion Management/Air Quality**) - ISTEA program that provides funding for air quality non-attainment areas to implement transportation projects that will contribute to an area's compliance with **National Ambient Air Quality Standards**.

CMS - Congestion Management System (see Management System)

CO - Carbon Monoxide

Conformity - The requirement that the state or metropolitan transportation plan, programs, and projects are consistent with the purpose of the State Implementation Plan (SIP). The CAAA does not permit federal approval of funding of any project that does not meet this test. See SIP.

Consultation - Means that one party confers with another identified party and, prior to taking action(s), considering that party's views. (Source: U.S. DOT, "Statewide Planning; Metropolitan Planning; Final Rules," October 28, 1993.)

Cooperation - Means that the parties involved in carrying out the planning, programming and management systems processes work together to achieve a common goal or objective. (Source: U.S. DOT, "Statewide Planning; Metropolitan Planning; Final Rules," October 28, 1993.)

Coordination - Means the comparison of the transportation plans, programs, and schedules of one agency with related plans, programs and schedules of other agencies or entities with legal standing, and adjustment of plans, programs and schedules to achieve general consistency. (Source: U.S. DOT, "Statewide Planning; Metropolitan Planning; Final Rules," October 28, 1993.)

CTPS (Central Transportation Planning Staff) - An interagency staff created by the MPO to carry out the MPO's general transportation planning activities and provide the member agencies with analyses on the work activities contained in this document.

DBE (**Disadvantaged Business Enterprise**) - An official designation applied to a business that is primarily owned and controlled by a person from a class that has historically suffered from discrimination in the workplace. DBEs are eligible for various contract preferences or set-asides under the state's public bidding process.

DEIS - Draft Environmental Impact Statement - A draft EIS. See EIS below.

DEP - (Department of Environmental Protection) Part of the Executive Office of Environmental Affairs.

EIS (Environmental Impact Statement) - Document that studies all likely impacts that will result from major federally assisted programs. Impacts include those on the natural environment, as well as impacts on the economy and society, and those on the built environment of historical and aesthetic significance.

EMME/2 - A software package, developed by INRO Consultants, that is designed for highly sophisticated travel modeling.

EOTC (Executive Office of Transportation and Construction) - A cabinet-level agency that sets state policies and plans for all modes of transport and that oversees public transit services, general aviation programs, and the state and local highway network. Established under M.G.L. Chapters 6A and 161A.

EPA - Environmental Protection Agency

FAA - Federal Aviation Administration

FAC (Massachusetts Freight Advisory Council) - A public/private committee sponsored by EOTC, which works to improve coordination of statewide freight movement.

FEIR - Final Environmental Impact Review - A state-level environmental analysis.

FHWA - Federal Highway Administration

FRA - Federal Railroad Administration

FTA - Federal Transit Administration

GEIR - Generic Environmental Impact Review

GIS - Geographic Information System

HOV (high-occupancy vehicle) - Applied to vehicles carrying two or more people. Roads may have lanes reserved for HOV use, such as carpools, vanpools and buses.

HPMS - Highway Performance Monitoring System

HSMP - Highway Safety Management Program (see Management System)

IMS - Intermodal Facilities and Systems Management System (see Management System)

Intermodal - Planning that reflects a focus on connectivity between modes as a means of facilitating linked tripmaking. It emphasizes connections, choices, coordination, and cooperation. Sometimes refers specifically to freight connections.

ISTEA (Intermodal Surface Transportation Efficiency Act of 1991) - Previous Federal surface transportation legislation that expired on October 1, 1997.

ITS (Intelligent Transportation System) - A program that seeks to develop or apply electronics, communications, or information processing technologies to improve the efficiency and safety of surface transportation systems.

ITS (Intelligent Vehicle Highway Systems) - Computer and communications technology that provides real-time information to operators of vehicles about transportation system conditions. Also includes technologies that identify, monitor, or control vehicles.

Regional Transportation Advisory Council - Citizen group that advises the MPO and its signatory agencies on transportation issues and reviews the Transportation Plan, TIP, and the UPWP.

Land Use - The purpose for which land or the structures on the land are being utilized: for example, commercial, residential, retail. Also used as a description of activities found throughout an urban area.

MAC (Massachusetts Aeronautics Commission) - Agency that is responsible for airports, mostly municipal, not managed by Massport. Established under M.G.L. Chapter 6, § 57.

Major Metropolitan Transportation Investment - A highway or transit improvement of substantial cost that is expected to have a significant effect on capacity, traffic flow, level of service, or mode share at the transportation corridor or subarea scale. (Source: U.S. DOT, "Statewide Planning; Metropolitan Planning; Final Rules," October 28, 1993.)

Management System - A systematic process, designed to assist decision makers in selecting cost effective strategies/actions to improve the efficiency and safety of, and protect the investment in, the nation's infrastructure. As required by Section 303 of ISTEA, states (in coordination with metropolitan areas) must develop and begin implementing six management systems: congestion, intermodal, public transportation, pavement, bridges, and safety.

MAP (Mobility Assistance Program) - A program to provide capital assistance to public agencies and private, non-profit corporations for the purchase of vehicles and related equipment in the provision of transportation services to people who are elderly and/or disabled.

MAPC (Metropolitan Area Planning Council) - Regional comprehensive planning agency for the Boston metropolitan area, covering 101 communities. Comprised of officials from cities, towns, and state agencies, and independent gubernatorial appointees. Established under M.G.L. Chapter 40B, § 24.

Massport (Massachusetts Port Authority) - Agency charged to operate and develop major commercial maritime and aviation facilities and the Tobin Bridge. Created as an independent authority in M.G.L. Chapter S73, § 2.

MBE/WBE - Minority-owned/women-owned business enterprise.

MBTA (Massachusetts Bay Transportation Authority) - Authority that provides mass transit service in eastern Massachusetts. Established under M.G.L. Chapter 161B.

MBTA Advisory Board - Representatives of cities and towns served by the MBTA. Powers relate to MBTA budget review and appointment of MBTA board members and general manager.

MDC (Metropolitan District Commission) - Agency that maintains 15,000 acres of parkland, numerous public beaches, and 650 miles of parkways. Established under M.G.L. Chapter 28, § 1.

MEPA - Massachusetts Environmental Policy Act

MetroPlan - The long-range land-use plan for the Boston region, which seeks to direct development primarily to Concentrated Development Centers (CDCs).

MHD (Massachusetts Highway Department) or MassHighway - Agency responsible for the design, construction, and maintenance of state highways and bridges. Established under M.G.L. Chapter 16, § 2.

MIS - Major Investment Study

Mode - A particular means of transportation (e.g., rail, automotive, bicycle, walking).

MOU (Memorandum of Understanding) - An agreement between public agencies. As an example, the Boston MPO was recently restructured, through an MOU between its member agencies, to include additional local participation in the decision-making process.

MPO (Metropolitan Planning Organization) - A forum for cooperative transportation decision making for a metropolitan area. The Boston MPO is comprised of seventeen members. The eight permanent members are EOTC (Chair), MBTA Advisory Board, MBTA, MassHighway, Massport, MAPC, MassPike, and the city of Boston. In addition, three cities and three towns are elected members of the MPO. Currently they are the cities of Everett Newton and Peabody; and the towns of Bedford, Framingham, and Hopkinton. The ex officio members are the Federal Highway Administration, the Federal Transit Administration and the Regional Transportation Advisory Council.

MTA or MassPike (Massachusetts Turnpike Authority) - Agency responsible for the operation of the Massachusetts Turnpike (a component of Interstate 90), the Sumner, Callahan and Ted Williams Harbor Tunnels, and the Metropolitan Highway System. Established under M.G.L. Chapter S75, § 3.

Multimodal - Planning that reflects consideration of more than one mode to serve transportation needs in a given area and that is included in the meaning of intermodal.

NAAQS (National Ambient Air Quality Standards) - Federal standards that set allowable concentrations and exposure limits for ozone and CO.

NHS - National Highway System

Nonattainment area - A geographic region that the U.S. EPA has designated as not meeting the NAAQS. The Boston area has been designated as being in serious nonattainment for ozone and moderate nonattainment for CO. See **NAAQS**.

NOx - Nitrogen Oxide

Ozone - A gas that is not a direct emission from transportation sources, but is formed when **VOCs** and **NOx** from car exhausts and industrial emissions combine in the presence of sunlight. Ground-level ozone is associated with smog conditions and initiates damage to lungs, trees, crops, and materials.

Paratransit - A demand-responsive system that applies to a variety of smaller, flexibly scheduled and routed transportation services using low-capacity vehicles. Used by persons, such as the elderly and other persons with disabilities, for whom use of standard mass transit services may prove difficult.

PL Funds - FHWA planning funds to be used to support MPO 3C planning efforts.

PMS - Pavement Management System (see Management System)

PMT (Program for Mass Transportation) - The MBTA's long-range capital plan, developed by EOTC and approved by the MBTA Advisory Board with full public involvement.

PROJIS - MHD's project information system, used for tracking projects from concept approval to advertisement.

Regionally Significant Project - A project (other than projects that may be grouped in the STIP/TIP) that is on a facility which serves regional transportation needs and would normally be included in the modeling of a metropolitan area's transportation network, including, as a minimum, all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel. (Source: U.S. DOT, "Statewide Planning; Metropolitan Planning; Final Rules," October 28, 1993.)

Section 5303 Funds - FTA funds to be used to support MPO planning activities.

Section 5309 Funds - FTA discretionary funds that may be used to support MPO planning activities.

SIP (State Implementation Plan) - A document that contains procedures to comply with the **NAAQS**, as specified in the **CAAA**. Prepared by states and submitted to the U.S. EPA for approval.

SOV - Single-occupant vehicle

SPR Funds - FHWA Statewide Planning and Research funds that may be used for metropolitan and statewide transportation planning. Formerly known as HPR Funds.

SSC (Sub-Signatory Committee of the MPO) - Designees of MPO members. They review and approve distribution of reports and other documents related to the Transportation Plan, TIP, and UPWP.

STIP (Statewide Transportation Improvement Program) - A staged, multi-year, statewide, intermodal program of transportation projects which is consistent with the Statewide transportation and planning processes and metropolitan plans, **TIPs** and processes. (see **TIP**) (Source: U.S. DOT, "Statewide Planning; Metropolitan Planning; Final Rules," October 28, 1993.)

STP (**Surface Transportation Program**) - A highway funding category established by ISTEA and continued in TEA-21. STP funds may be used for bridge projects, highway projects, bicycle and pedestrian projects, highway safety projects, and enhancement projects. STP funds may also be transferred to FTA and converted into transit funding.

TANF-Transitional Aid to Needy Families

TCM (**Transportation Control Measure**) - Actions, which are usually found in a SIP, that improve traffic flow, or reduce vehicle use or congestion with the objective of reducing air pollutant emissions. See **SIP**.

TDM (Transportation Demand Management) - In its most general form, any action or actions that attempt to control or alter existing travel patterns or use. Included in this group is a wide range of strategies, such as promoting ridesharing, requiring alternative workhours or flextime, or increasing travel costs for single-occupant vehicles.

TEA-21 (Transportation Equity Act for the 21st Century) - Federal surface transportation legislation that authorizes federal-aid programs for transit systems and highways for a period of six years.

TE/SIP - Transportation Element of the State Implementation Plan

"3C" process - A *continuing, comprehensive* transportation planning process carried out *cooperatively* by states and local communities.

TIP (**Transportation Improvement Program**) - A staged, multi-year, intermodal program of transportation projects which is consistent with the metropolitan transportation plan. (Source: U.S. DOT, "Statewide Planning; Metropolitan Planning; Final Rules," October 28, 1993.)

TMA (Transportation Management Area) - An urbanized area over 200,000 in population. Within a TMA, all transportation plans and programs must be based on the 3C process. The TMA boundary affects the responsibility for the selection of transportation projects that receive federal funds. (Source: U.S. DOT, "Statewide Planning; Metropolitan Planning; Final Rules," October 28, 1993.)

Transportation Plan - The official intermodal transportation plan that is developed and adopted through the metropolitan transportation planning process for the metropolitan area. The plan must give consideration to fifteen factors, including land use, financial resources, environmental impacts, and the management systems.

UPWP (Unified Planning Work Program) - Document required by the U.S. DOT Metropolitan Planning regulations that contains a description of all proposed transportation-related planning activities and air quality planning activities.

VOCs - Volatile Organic Compounds